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About the Journal

Bagcilar Medical Bulletin (Bağcılar Tıp Bülteni) (BMB) is periodical scientific publishing of Health Sciences University, İstanbul Bağcılar Training and Research Hospital.This editorially independent, unbiased, international journal periodically publishes peer-reviewed work in the all medical fields on an international scientific basis. Publication language is English for full text and Turkish and English for abstracts. The journal is published in English since December issue of 2016 as an e-journal.

The journal is published quarterly in March, June, September and December.

Original clinical and experimental articles,interesting case studies, and literature reviews made from relevant authors in their brancheswill be accepted for evaluation in BMB.

The editorial policies are based on the "Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals (ICMJE Recommendations)" by the International Committee of Medical Journal Editors (2017, archived at http://www.icmje.org/) rules.

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Bağcılar Tıp Bülteni/Bagcilar Medical Bulletin, (BTB) Sağlık Bilimleri Üniversitesi, İstanbul Bağcılar Eğitim ve Araştırma Hastanesinin süreli bilimsel yayınıdır. Uluslararası, hakem değerlendirmeli, İngilizce ve açık erişim olarak yılda 4 sayı(Mart, Haziran, Eylül, Aralık) olarak yayınlanan bilimsel bir dergi olup, tıbbın tüm alanlarındaki bilgi birikiminin uluslararası bilimsel platformda yayılabilmesini amaçlamaktadır. Bu amaçla tıbbın her alanında yapılmış orijinal klinik ve deneysel çalışmalar ve ilginç olgu sunumları ile konusunda uzman yazarların yaptığı literatür derlemeleri yayın için değerlendirmeye alınır.

Bağcılar Tıp Bülteni/Bagcilar Medical Bulletin, yazıların İngilizce dilinde, yazıların özetlerinin Türkçe ve İngilizce dillerinde online olarak yayınlandığı bir dergidir.

Yayın politikaları "Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals (ICMJE Recommendations)" (2016, http://www.icmje.org/) temel alınarak hazırlanmıştır.

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T.C.Sağlık Bakanlığı Sağlık Bilimleri Üniversitesi, İstanbul Bağcılar Eğitim ve Araştırma Hastanesi adına Hastane Yöneticisi Ahmet Yaser Müslümanoğlu, Prof. M.D (Türkiye Cumhuriyeti Sağlık Bakanlığı Sağlık Bilimleri Üniversitesi, İstanbul Bağcılar Eğitim ve Araştırma Hastanesi, Üroloji Kliniği, İstanbul, Türkiye).

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Description

Bagcilar Medical Bulletin is a peer reviewed English journal aiming to publish original research, current review articles, case reports and letters related to all medical fields. The journal is currently published quarterly as online publication. The articles will become freely available to all readers in pdf format as soon as they have been accepted after peer review. Accepted articles will immediately appear as a part of the issue belonging to that publication period. The journal is currently published by Galenos Publishing House. The journal is using online manuscript submission, review and tracking systems.

Editorial Policies and Review Process

Publication Policy

Bagcilar Medical Bulletin considers for publication papers in the following categories:

- Original researches,
- Brief researches,
- Case reports,
- Reviews,
- Letters to the editor

The journal gives high priority to original studies in publication because of aiming to add the findings of searches in Turkey to international scientific knowledge, to share them within the international science milieu and to constitute the introduction of Turkish scientists. The review articles to be published in the journal are authorized by the editor to the relevant authors working on the subject.

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Papers that have not been published before or under evaluation by other publications are accepted for evaluation by the journal, if approved by each of the author. Publication board may amend manuscripts upon informed consent of authors. Editors and redactors are fully empowered to correct mistakes related to orthography, citation as given in National Library of Medicine MEDLINE/PubMed Resources.

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All submissions must be original, unpublished (including as full text in conference proceedings), and not under the review of any other publication synchronously. Each manuscript is reviewed by one of the editors and at least two referees under double-blind peer review process. We reserve the right to use plagiarism detecting software to screen submitted papers at all times. We check for plagiary and fraudulent data; falsification (fabrication or manipulation of research data, tables, or images) and improper use of humans or animals in research. All manuscripts not in accordance with these standards will be removed from the publication. This also contains any possible malpractice discovered after the publication. In accordance with the code of conduct we will report any cases of suspected plagiarism or duplicate publishing.

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The language of the Bagcilar Medical Bulletin is American English. In addition, abstracts of the articles are published in both English and Turkish, and abstracts in both languages are requested from the authour(s).

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All correspondence will be sent to the first-named author unless otherwise specified. Papers should be accompanied by a cover letter indicating that the paper is intended for publication and specifying for which section of the Journal it is being submitted (i.e., original research article,brief research article, review article, case report or letter to the editor). In addition, a Copyright Transfer Form, Author Contribution Form and ICJME Form for Disclosure of Potential Conflicts of Interest must be submitted. Authors will be notified of the receipt of their paper and the number assigned to it. The number should be included in all further correspondence. All parts of the manuscript, including case reports, quotations, references, and tables, must be double-spaced throughout. All four margins must be at least 2.5 cm. The manuscript should be arranged in the following order, with each item beginning a new page: 1) title page, 2) abstract, 3) text, 4) acknowledgement 5) references, and 6) tables and/or figures. All pages must be numbered consecutively.

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On the title page, include full names of authors, academic or professional affiliations, and complete address with phone, fax number(s) and e-mail address (es) of the corresponding author. Acknowledgments for personal and technical assistance should be indicated on the title page.

Abstract and Key Words

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Manuscript Types

Original Research

Original research articles report substantial and original scientific results within the journal scope. Original research articles comprised of Abstract, Key Words, Introduction, Material and Methods, Results, Discussion, Conclusion, References and Table/Figures. The abstract should be structured as the following.

Abstract

The abstract should be no longer than 500 words and structured as follows: objective, method, results, and conclusions. Objective -the primary purpose of the article; Material and Method(s) -data sources, design of the study, patients or participants, interventions, and main outcome measures; Results -key findings; Conclusions -including direct clinical applications.

Key Words

Up to 3-10 key words in English and in Turkish should be in accordance with National Library of Medicine's Medical Subjects Subheadings (MeSH).

Introduction

This section should contain a clear statement of the general and specific objectives as well as the hypotheses which the work is designed to test. It should also give a brief account of the reported literature. The last sentence should clearly state the primary and secondary purposes of the article. Only, the actual references related with the issues have to be indicated and data or findings related with the current study must not be included in this section.

Material and Methods

This section should contain explicit, concise descriptions of all procedures, materials and methods used in the investigation to enable the reader to judge their accuracy, reproducibility, etc. This section should include the known findings at the beginning of the study and the findings during the study must be reported in results section. Ethics Committee Approval of the research and written Informed Consent obtained from the participants should be indicated.

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The results should be presented in logical sequence in the text, tables, and illustrations, giving the main or most important findings first. The all the data in the tables or illustrations should not be repeated in the text; only the most important observations must be emphasized or summarized. Extra or supplementary materials and technical detail can be placed in an appendix where they will be accessible but will not interrupt the flow of the text, or they can be published solely in the electronic version of the journal.

Discussion

The findings of the study, the findings and results which support or do not support the hypothesis of the study should

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be discussed, results should be compared and contrasted with findings of other studies in the literature and the different findings from other studies should be explained. The new and important aspects of the study and the conclusions that follow from them should be emphasized. The data or other information given in the Introduction or the Results section should not be repeated in detail.

Conclusions

Conclusions derived from the study should be stated. For experimental studies, it is useful to begin the discussion by summarizing briefly the main findings, then explore possible mechanisms or explanations for these findings, compare and contrast the results with other relevant studies, state the limitations of the study, and explore the implications of the findings for future research and for clinical practice. The conclusions should be linked with the goals of the study but unqualified statements and conclusions not adequately supported by the data should be avoided. New hypotheses should be stated when warranted, but should be labeled clearly as such.

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Tables, graphics and illustrations should be numbered in Arabic numerals in the text. The places of the illustrations should be signed in the text. Detailed information is under the related heading in below.

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Brief researches are similar to original research in that they follow the same format and guidelines, but they consider small-scale research or research that is in early stages of development. These may include preliminary studies that has a simple research design or a small sample size and that have produced limited pilot data and initial findings that indicate need for further investigation. Brief researches are much shorter than manuscripts associated with a more advanced, larger-scale research project. They are not meant to be used for a short version of an article about research that would otherwise qualify for a full original research manuscript or for publishing material on research that lacks significance, is not rigorous or, if expanded, would not qualify for a full article or for research.

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Case reports consider new, interesting and intriguing case studies in detail. They should be unique and present methods to overcome any health challenge by use of novel tools and techniques and provide a learning source for the readers. Case reports comprise of: Abstract (unstructured summary), Key-words, Introduction, Case Report, Discussion, Reference, Tables and Figures. Written informed consent of the patient should be obtained and indicated in the manuscript.

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Preparation of Manuscripts

The "Bagcilar Medical Bulletin'' follows the Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals" (International Committee of Medical Journal Editors - http://www.icmje.org/). Upon submission of the manuscript, authors are to indicate the type of trial/research and provide the checklist of the following guidelines when appropriate:

CONSORT statement for randomized controlled trials (Moher D, Schultz KF, Altman D, for the CONSORT Group. The CONSORT statement revised recommendations for improving the quality of reports of parallel group randomized trials. JAMA 2001; 285: 1987-91) (http://www.consort-statement.org /),

PRISMA for preferred reporting items for systematic reviews and meta-analyses (Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 2009; 6(7): e1000097.) (http://www.prisma-statement.org /),

STARD checklist for the reporting of studies of diagnostic accuracy (Bossuyt PM, Reitsma JB, Bruns DE, Gatsonis CA, Glasziou PP, Irwig LM, et al, for the STARD Group. Towards complete and accurate reporting of studies of diagnostic accuracy: the STARD initiative. Ann Intern Med 2003;138:40-4.) (http://www.stard-statement.org /),

INSTRUCTIONS TO AUTHORS

STROBE statement-checklist of items that should be included in reports of observational studies (http://www.strobe-statement.org /),

MOOSE guidelines for meta-analysis and systemic reviews of observational studies (Stroup DF, Berlin JA, Morton SC, et al. Meta-analysis of observational studies in epidemiology: a proposal for reporting Meta-analysis of observational Studies in Epidemiology (MOOSE) group. JAMA 2000; 283: 2008-12).

CARE guidelines are designed to increase the accuracy, transparency, and usefulness of case reports. (Gagnier JJ, Kienle G, Altman DG, Moher D, Sox H, Riley D; the CARE Group. The CARE Guidelines: Consensus-based Clinical Case Reporting Guideline Development.) (http://www.care-statement.org /

References

Although references to review articles can be an efficient way to guide readers to a body of literature, review articles do not always reflect original work accurately. Readers should therefore be provided with direct references to original research sources whenever possible. On the other hand, extensive lists of references to original work on a topic can use excessive space on the printed page. Small numbers of references to key original papers often serve as well as more exhaustive lists, particularly since references can now be added to the electronic version of published papers, and since electronic literature searching allows readers to retrieve published literature efficiently. Using abstracts as references should be avoided.

References to papers accepted but not yet published should be designated as “in press” or “forthcoming”; authors should obtain written permission to cite such papers as well as verification that they have been accepted for publication. Information from manuscripts submitted but not accepted should be cited in the text as “unpublished observations” with written permission from the source. Citing a “personal communication” should be avoided unless it provides essential information not available from a public source, in which case the name of the person and date of communication should be cited in parentheses in the text. For scientific articles, written permission and confirmation of accuracy from the source of a personal communication must be obtained.

Reference Style and Format

The Uniform Requirements style for references is based largely on an American National Standards Institute style adapted by the National Library of Medicine for its databases. Authors should consult NLM’s Citing Medicine (http://www.nlm.nih.gov/bsd/uniform_requirements.html) for information on its recommended formats for a variety of reference types. References should be numbered consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by Arabic numerals in parentheses. References cited only in tables or figure legends should be numbered in accordance with the sequence established by the first identification in the text of the particular table or figure. The titles of journals should be abbreviated according to the style used in the list of Journals in National Library of Medicine sources. In addition the list should be obtained in the web address of http://www.nlm.nih.gov. Accuracy of citation is the author’s responsibility. All references should be cited in text. Type references in the style shown below. If there are more than 6 authors, list them followed by et al. Abbreviations of journal names should conform to the style used in National Library of Medicine. If a journal is not indexed in National Library of Medicine’s MEDLINE/PubMed, it should not be abbreviated.

Examples for References:

1. For articles in journals:

For the published article from the journal which placed and abbreviated in MEDLINE:

Crow SJ, Peterson CB, Swanson SA, Raymond NC, Specker S, Eckert ED, et al. Increased mortality in bulimia nervosa and other eating disorders. Am J Psychiatry 2009;166(12):1342-1346.

For the published article from the journal which is not placed and is not abbreviated in MEDLINE:

Sevinçer GM, Konuk N. Emotional eating. Journal of Mood Disorders 2013;3(4):171-178.

2. For the supplement:

For the published article from the journal which placed and abbreviated in MEDLINE:

Sharan P, Sundar AS. Eating disorders in women. Indian J Psychiatry 2015:57(Suppl 2):286-295.

For the published article from the journal which is not placed and is not abbreviated in MEDLINE:

Maner F. Yeme bozukluklarının tedavisi. Anadolu Psikiyatri Dergisi 2009;10(Ek 1):55-56.

3. For articles in press:

Cossrow N, Pawaskar M, Witt EA, Ming EE, Victor TW, Herman BK, et al. Estimating the prevalence of binge eating disorder in a community sample from the United States: comparing DSM-IV-TR and DSM-5 criteria. J Clin Psychiatry, 2016. (in press).

4. For the citations from books:

Books edited by one editor:

McKnight TL. Obesity Management in Family Practice. 1st ed., NewYork: Springer, 2005:47-51.

INSTRUCTIONS TO AUTHORS

For the citation from a section of book edited by editor(s):

Jebb S, Wells J. Measuring body composition in adults and children. In Clinical Obesity in Adults and Children, Copelman P, Caterson I, Dietz W (editors). 1st ed., London: Blackwell Publishing, 2005:12-18.

If the authors of the cited section are the editors of the book:

Eckel RH (editor). Treatment of obesity with drugs in the new millennium. In Obesity Mechanisms and Clinical Management. First ed., Philadelphia: Lippincott Williams & Wilkins, 2003:449-476.

For the citation from a translated book:

McGuffin P, Owen MJ, Gottsman II. Psikiyatri Genetiği ve Genomiği. Abay E, Görgülü Y (Çevirenler) 1st ed., Istanbul: Nobel Tıp Kitabevleri, 2009:303-341.

5. For the citation from thesis:

Keçeli F. Yeme bozukluğu hastalarında obsesif kompulsif bozukluk ve kişilik bozukluğu. Thesis, T.C. Sağlık Bakanlığı Bakırköy Prof. Dr. Mazhar Osman Ruh Sağlığı ve Sinir Hastalıkları Eğitim ve Araştırma Hastanesi, Istanbul:2006.

6. For the citation from posters:

Akbaş Öncel D, Akdemir A. Üniversite öğrencilerinde diyet, beden algısı ve kendilik algısı arasındaki ilişkiler. 47. Ulusal Psikiyatri Kongresi Özet Kitabı, 26-30 Ekim 2011, Antalya, 2011:102.

7. Online Article:

Kaul S, Diamond GA. Good enough: a primer on the analysis and interpretation of noninferiority trials. Ann Intern Med [Internet]. 2006 Jul 4 [cited 2007 Jan 4];145(1):62-9. Available from:http://www.annals.org/cgi/reprint/145/1/62.pdf

SUBMISSION TO JOURNAL

All new manuscripts must be submitted through the Bagcilar Medical Bulletin online manuscript submission and peer review system. Complete instructions are available at the website (). A cover letter should accompany with manuscripts, including the knowledge of:

•The findings of previous same studies should be informed and should be cited. The copies of previous same studies should be sent with manuscripts that might help to the editor in the decision process.

•The knowledge of "all authors have read and accepted the study in its form, all authors meet the criteria for being in authorship" should be stated.

•All helpful things for editorial ship should be stated: The comments of previous editor/reviewers and the response of authors should be added if the manuscript has been sent to another journal for consideration, previously. The editor requested this information to accelerate the publication process.

SUBMISSION CHECKLIST

It is hoped that this list will be useful during the final checking of an article prior to sending it to the journal's editor for review. Please consult this Guide for Authors, for further details of any item.

Ensure that the following items are present:

- Cover letter to the editor
- The category of the manuscript
- Acknowledgement of "the paper is not under consideration for publication in another journal"
- Disclosure of any commercial or financial involvement
- Reviewing the statistical design of the research article
- Last control for fluent English
- Copyright Transfer Form
- Author Contribution Form
- ICJME Form for Disclosure of Potential Conflicts of Interest
- Permission of previous published material if used in the present manuscript
- Acknowledgement of the study "in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of in 2000.
- Statement that informed consent was obtained after the procedure(s) had been fully explained.
- Indicating whether the institutional and national guide for the care and use of laboratory animals was followed as in "Guide for the Care and Use of Laboratory Animals".
- Title page
- The title of the manuscript both in Turkish and in English
- All authors and their affiliations
- All authors' e-mail address, full postal address, GSM phone, business telephone and fax numbers
- Abstracts (400-500 words) Both in Turkish and in English
- Key words: 3 to 10 words (in Turkish and in English)
- Body text
- Acknowledgement
- Reference
- All tables (including title, description, footnotes)

YAZARLARA BİLGİ

Derginin Tanımı

Bağcılar Tıp Bülteni (Bagcilar Medical Bulletin), tıbbın her alanında araştırma makalelerini, güncel derleme yazılarını, olgu sunumlarını ve editöre mektupları İngilizce tam metin ve Türkçe özle yayınlayan hakemli bir dergidir. Dergi online olarak yılda 4 sayı yayınlanmaktadır. Tüm makaleler kabul edilir edilmez, online olarak pdf formatında bu web sitesinde, o dönemdeki sayının bir makalesi olarak yer alacaktır. Dergi Galenos Yayınevi tarafından yayımlanmaktadır.

Editoryal Politikalar ve Hakem Süreci

Yayın Politikası

Bağcılar Tıp Bülteni, yayınlanmak üzere gönderilen yazıları aşağıda belirtilen şekillerde kabul eder:

- Orijinal araştırmalar,
- Kısa araştırmalar,
- Olgu sunumları,
- Derlemeler,
- Editöre mektup

Dergi, Türkiye'de yapılan araştırmaların uluslararası bilim arenasına duyurulması, uluslararası bilim çevrelerince paylaşılması ve bu bağlamda Türkiye'nin tanıtılmasına katkıda bulunmayı misyon edindiğinden özellikle orijinal araştırma niteliğindeki yazıları yayınlamaya öncelik vermektedir. Dergide yayınlanacak derleme türündeki yazılar editör tarafından konu ile ilgili çalışan yetkin kişilere hazırlatılmaktadır.

Genel İlkeler

Daha önce yayınlanmamış ya da yayınlanmak üzere başka bir dergide halen değerlendirmede olmayan ve her bir yazar tarafından onaylanan makaleler dergide değerlendirilmek üzere kabul edilir. Yayın kurulu, yazarların iznini alarak yazıda değişiklikler yapabilir. Editör ve dil editörleri dil, imlâ ve kaynakların National Library of Medicine MEDLINE/PubMed Resources'da belirtildiği gibi yazılmasında ve ilgili konularda tam yetkilidir.

Eğer makalede daha önce yayınlanmış alıntı yazı, tablo, resim vs. mevcut ise makale yazarı, yayın hakkı sahibi ve yazarlarından yazılı izin almak ve bunu makalede belirtmek zorundadır. Gerekli izinlerin alınıp alınmadığından yazar(lar) sorumludur.

Bilimsel toplantılarda sunulan özet bildiriler, makalede belirtilmesi koşulu ile kaynak olarak kabul edilir. Editör, dergiye gönderilen makale biçimsel esaslara uygun ise, gelen yazıyı yurtiçinden ve/veya yurtdışından en az iki hakemin değerlendirmesinden geçirtir, hakemler gerek gördüğü takdirde yazıda istenen değişiklikler yazarlar tarafından yapıldıktan sonra yayınlanmasına onay verir. Makale yayınlanmak üzere dergiye gönderildikten sonra yazarlardan hiçbirinin ismi, tüm yazarların yazılı izni olmadan yazar listesinden silinemez ve yeni bir isim yazar olarak eklenemez ve yazar sırası değiştirilemez. Yayına kabul edilmeyen makale, resim ve fotoğraflar yazarlara geri gönderilmez.

Yazarların Sorumluluğu

Makalelerin bilimsel ve etik kurallara uygunluğu yazarların sorumluluğundadır. Yazar makalenin orijinal olduğu, daha önce başka bir yerde yayınlanmadığı ve başka bir yerde, başka bir dilde yayınlanmak üzere değerlendirmede olmadığı konusunda teminat sağlamalıdır. Uygulamadaki telif kanunları ve anlaşmaları gözetilmelidir. Telife bağlı materyaller (örneğin tablolar, şekiller veya büyük alıntılar) gerekli izin ve teşekkürle kullanılmalıdır. Başka yazarların, katkıda bulunanların çalışmaları ya da yararlanılan kaynaklar uygun biçimde kullanılmalı ve referanslarda belirtilmelidir.

Gönderilen makalede tüm yazarların akademik ve bilimsel olarak doğrudan katkısı olmalıdır, bu bağlamda "yazar" yayınlanan bir araştırmanın kavramsallaştırılmasına ve desenine, verilerin elde edilmesine, analizine ya da yorumlanmasına belirgin katkı yapan; yazının yazılması ya da bunun içerik açısından eleştirel biçimde gözden geçirilmesinde görev yapan; yazının yayınlanmak üzere nihai halini onaylayan ve çalışmanın herhangi bir bölümünün doğruluğuna ya da bütünlüğüne ilişkin soruların uygun şekilde soruşturulduğunun ve çözümlendiğinin garantisini vermek amacıyla çalışmanın her yönünden sorumlu olmayı kabul eden kişi olarak görülür. Fon sağlanması, ya da araştırma grubunun genel süpervizyonu tek başına yazarlık hakkı kazandırmaz. Yazar olarak gösterilen tüm bireyler sayılan tüm ölçütleri karşılamalıdır ve yukarıdaki ölçütleri karşılayan her birey yazar olarak gösterilebilir. Çok merkezli çalışmalarda grubun tüm üyelerinin yukarıda belirtilen şartları karşılaması gereklidir. Yazarların isim sıralaması ortak verilen bir karar olmalıdır. Tüm yazarlar yazar sıralamasını Telif Hakkı Devir Formunda imzalı olarak belirtmek zorundadırlar. Yazarların tümünün ismi yazının başlığının altındaki bölümde yer almalıdır.

Yazarlık için yeterli ölçütleri karşılamayan ancak çalışmaya katkısı olan tüm bireyler teşekkür (acknowledgement) kısmında sıralanmalıdır. Bunlara örnek olarak ise sadece teknik destek sağlayan, yazıma yardımcı olan ya da sadece genel bir destek sağlayan kişiler verilebilir. Finansal ve materyal destekleri de belirtilmelidir.

Yazıya materyal olarak destek veren ancak yazarlık için gerekli ölçütleri karşılamayan kişiler "klinik araştırıcılar" ya da "yardımcı araştırıcılar" gibi başlıklar altında toplanmalı ve bunların işlevleri ya da katılımları "bilimsel danışmanlık yaptı", "çalışma önerisini gözden geçirdi", "veri topladı" ya da "çalışma hastalarının bakımını üstlendi" şeklinde belirtilmelidir.

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Teşekkür (acknowledgement) kısmında belirtilen bu ifadeler için bu bireylerden de yazılı izin alınması gerekmektedir.

Bütün yazarlar, araştırmanın sonuçlarını ya da bilimsel değerlendirmeyi etkileyebilme potansiyeli olan finansal ilişkiler, çıkar çatışması ve çıkar rekabetini beyan etmelidirler. Bir yazar kendi yayınlanmış yazısında belirgin bir hata ya da yanlışlık tespit ederse, bu yanlışlıklara ilişkin düzeltme ya da geri çekme için yayın yönetmeni ile hemen temasa geçme ve işbirliği yapma sorumluluğunu taşır. Yazarların katkısını belirten Yazar Katkı Formu ve çıkar çatışması olup olmadığını belirten ICMJE Potansiyel Çıkar Çatışması Beyan Formu makale ile birlikte gönderilmelidir. Yazarların görevleri ve sorumlulukları konusunda aşağıdaki kaynağa bakabilirsiniz; http://www.icmje.org/recommendations/browse/roles-and-responsibilities/

Editör ve Hakem Sorumlulukları ve Değerlendirme Süreci

Editörler, makaleleri, yazarların etnik kökeninden, cinsiyetinden, cinsel yöneliminden, uyruğundan, dini inancından ve siyasi felsefesinden bağımsız olarak değerlendirirler. Yayına gönderilen makalelerin adil bir şekilde çift taraflı kör hakem değerlendirmesinden geçmelerini sağlarlar. Gönderilen makalelere ilişkin tüm bilginin, makale yayınlanana kadar gizli kalacağını garanti ederler. Editörler içerik ve yayının toplam kalitesinden sorumludurlar. Gereğinde hata sayfası yayınlamalı ya da düzeltme yapmalıdırlar.

Genel Yayın Yönetmeni; yazarlar, editörler ve hakemler arasında çıkar çatışmasına izin vermez. Hakem atama konusunda tam yetkiye sahiptir ve Bağcılar Tıp Bülteni'nde yayınlanacak makalelerle ilgili nihai kararı vermekle yükümlüdür. Yayın etiği konusunda COPE kaynağına bakabilirsiniz. https://publicationethics.org/files/u7141/1999pdf13.pdf

Hakemler makaleleri, yazarların etnik kökeninden, cinsiyetinden, cinsel yöneliminden, uyruğundan, dini inancından ve siyasi felsefesinden bağımsız olarak değerlendirirler. Araştırmayla ilgili, yazarlarla ve/veya araştırmanın finansal destekçileriyle çıkar çatışmaları olmamalıdır. Değerlendirmelerinin sonucunda tarafsız bir yargıya varmalıdırlar. Hakemler yazarların atıfta bulunmadığı konuyla ilgili yayınlanmış çalışmaları tespit etmelidirler. Gönderilmiş yazılara ilişkin tüm bilginin gizli tutulmasını sağlamalı ve yazar tarafında herhangi bir telif hakkı ihlali ve intihal fark ederlerse Genel Yayın Yönetmeni'ne raporlamalıdırlar. Hakem, makale konusu hakkında kendini vasıflı hissetmiyor ya da zamanında geri dönüş sağlaması mümkün görünmüyorsa, Genel Yayın Yönetmeni'ne bu durumu bildirmeli ve hakem sürecine kendisini dahil etmemesini istemelidir.

Editör makalelerle ilgili bilgileri (makalenin alınması, içeriği, gözden geçirme sürecinin durumu, hakemlerin eleştirileri ya da varılan sonuç) yazarlar ya da hakemler dışında kimseyle paylaşmaz.

Değerlendirme sürecinde editör hakemlere gözden geçirme için gönderilen makalelerin, yazarların özel mülkü olduğunu ve bunun imtiyazlı bir iletişim olduğunu açıkça belirtir. Hakemler ve yayın kurulu üyeleri topluma açık bir şekilde makaleleri tartışamazlar. Hakemlerin kendileri için makalelerin kopyalarını çıkarmalarına izin verilmez ve editörün izni olmadan makaleleri başkasına veremezler. Hakemler gözden geçirmelerini bitirdikten sonra makalenin kopyalarını yok etmeli ya da editöre göndermelidirler. Dergimiz editörü de reddedilen ya da geri verilen makalelerin kopyalarını imha etmelidir.

Yazarın ve editörün izni olmadan hakemlerin gözden geçirmeleri basılamaz ve açıklanamaz. Hakemlerin kimliğinin gizli kalmasına özen gösterilmelidir. Bazı durumlarda editörün kararıyla, ilgili hakemlerin makaleye ait yorumları aynı makaleyi yorumlayan diğer hakemlere gönderilerek hakemlerin bu süreçte aydınlatılması sağlanabilir. Değerlendirme süreciyle ilgili olarak COPE kaynağına bakabilirsiniz: http://publicationethics.org/files/Peer review guidelines.pdf

Açık Erişim İlkesi

Açık erişimli bir yayın olan Bağcılar Tıp Bülteni dergisinin tüm içeriği okura ya da okurun dahil olduğu kuruma ücretsiz olarak sunulur. Okurlar, yayıncı ya da yazardan izin almadan dergi makalelerinin tam metnini okuyabilir, indirebilir, kopyalayabilir, dağıtabilir, basabilir, arayabilir ve link sağlayabilir.

Yayın Etiği

İlke ve Standartlar

Bağcılar Tıp Bülteni yayın etiğinde en yüksek standartlara bağlıdır ve Committee on Publication Ethics (COPE), Council of Science Editors (CSE), World Association of Medical Editors (WAME) ve International Committee of Medical Journals (ICJME) tarafından geliştirilen yayın etiği ilkelerini ve tavsiyelerini gözetir.

Gönderilen tüm makaleler orijinal, yayınlanmamış (konferans bildirilerindeki tam metinler de dahil) ve başka bir dergide değerlendirme sürecinde olmamalıdır. Her bir makale editörlerden biri ve en az iki hakem tarafından çift kör değerlendirmeden geçirilir. Gönderilen makaleleri intihal yazılımı ile denetleme hakkımız haklıdır. İntihal, veride hile ve tahrif (araştırma verisi, tabloları ya da imajlarının manipülasyonu ve asılsız üretimi), insan ve hayvanların araştırmada uygun olmayan kullanımı konuları denetimden

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geçmektedir. Bu standartlara uygun olmayan tüm makaleler yayından çıkarılır. Buna yayından sonra tespit edilen olası kuraldışı, uygunsuzluklar içeren makaleler de dahildir. Yayın etiği kurallarına bağlı olarak, intihal şüphesini ve duplikasyon durumlarını rapor edeceğimizi belirtiriz. Olası bilimsel hatalı davranışları ve yayın etiği ihlali vakalarını ele alırken COPE Ethics Flowcharts http://publicationethics.org/resources/flowcharts izlenir.

İnsan ve Hayvan Hakları, Bilgilendirilmiş Olur, Çıkar Çatışması

Bağcılar Tıp Bülteni, yayınladığı makalelerin ticarî kaygılardan uzak ve konu ile ilgili en iyi etik ve bilimsel standartlarda olması şartını gözetmektedir. Makalelerin etik kurallara uygunluğu yazarların sorumluluğundadır.

Bağcılar Tıp Bülteni, 1975 Helsinki Deklarasyonu'nun 2004 yılında revize edilen Ethical Principles for Medical Research Involving Human Subjects'e http://www.wma.net/en/30publications/10policies/b3/index.html ve 2006 yılında revize edilen WMA Statement on Animal Use in Biomedical Research'e http://www.wma.net/en/30publications/10policies/a18/uymayı prensip edinmiştir. Bu yüzden dergide yayınlanmak üzere gönderilen yazılarda, klinik deneylere katılan denekler ile ilgili olarak yukarıda belirtilen etik standartlara uyulduğunun mutlaka belirtilmesi gerekmektedir. Ayrıca deneyin türüne göre gerekli olan yerel veya ulusal etik komitelerden alınan onay yazıları yazı ile birlikte gönderilmelidir. Bununla birlikte deneye katılan kişi/hastalardan, hastalar eğer temyiz kudretine sahip değilse vâsilerinden yazılı bilgilendirilmiş onam alındığını belirten bir yazı ile beraber tüm yazarlar tarafından imzalanmış bir belgenin editöre gönderilmesi gerekmektedir.

Hastalardan izin alınmadan mahremiyet bozulamaz. Hastaların ismi, isimlerinin baş harfleri ya da hastane numaraları gibi tanımlayıcı bilgiler, fotoğraflar ve soy ağacı bilgileri vb. bilimsel amaçlar açısından çok gerekli olmadıkça ve hasta (ya da anne-baba, ya da vâsisi) yazılı bilgilendirilmiş onam vermedikçe basılmazlar. Özellikle olgu bildirimlerinde, çok gerekli olmadıkça hasta ile ilgili tanımlayıcı ayrıntılar çıkarılmalıdır. Örneğin, fotoğraflarda göz bölgesinin maskelenmesi kimliğin gizlenmesi için yeterli değildir. Eğer veriler kimliğin gizlenmesi için değiştirildiyse yazarlar bu değişikliklerin bilimsel anlamı etkilemediği konusunda güvence vermelidirler. Olgu sunumlarında yer verilen hastalardan bilgilendirilmiş onam alınmalıdır. Bilgilendirilmiş onam alındığı da makalede belirtilmelidir.

Bu tip çalışmaların varlığında yazarlar, makalenin YÖNTEM(LER) bölümünde bu prensiplere uygun olarak çalışmayı yaptıklarını, kurumlarının etik kurullarından ve çalışmaya katılmış insanlardan "bilgilendirilmiş onam" aldıklarını belirtmek zorundadırlar.

Çalışmada "hayvan" kullanılmış ise yazarlar, makalenin YÖNTEM(LER) bölümünde "Guide for the Care and Use of Laboratory Animals" (www.nap.edu/catalog/5140.html) doğrultusunda çalışmalarında hayvan haklarını koruduklarını ve kurumlarının etik kurullarından onay aldıklarını belirtmek zorundadırlar. Hayvan deneyleri rapor edilirken yazarlar, laboratuvar hayvanlarının bakımı ve kullanımı ile ilgili kurumsal ve ulusal rehberlere uyup uymadıklarını yazılı olarak bildirmek zorundadırlar.

Editör ve yayıncı, reklâm amacı ile dergide yayınlanan ticari ürünlerin özellikleri ve açıklamaları konusunda hiçbir garanti vermemekte ve sorumluluk kabul etmemektedir. Eğer makalede doğrudan veya dolaylı ticarî bağlantı veya çalışma için maddî destek veren kurum mevcut ise yazarlar; kaynak sayfasında, kullanılan ticarî ürün, ilaç, ilaç firması v.b. ile ticari hiçbir ilişkisinin olmadığını veya varsa nasıl bir ilişkisinin olduğunu (konsültan, diğer anlaşmalar) bildirmek zorundadır. Bağcılar Tıp Bülteni, WAME'nin çıkar çatışması tanımını benimser http://www.wame.org/about/wame-editorial-on-coi

Buna göre, yazar, hakem ya da editör sorumluluklarını aşırı düzeyde ve/veya haksızlığa yol açabilecek düzeyde etkileyebilecek ya da etkileyebileceği olası bir çıkar rekabeti içindeyse, çıkar çatışması söz konusudur ve bunun açıklanması gerekir. Açıklanması öngörülen çıkar çatışması tipleri, finansal bağlar, akademik taahhütler, kişisel ilişkiler, politik ya da dini inançlar, kurumsal bağlantılardır. Çıkar çatışması söz konusuysa bu makalede açıklanmalıdır.

Dil

Bağcılar Tıp Bülteni'nin yayın dili Amerikan İngilizcesi'dir, ayrıca makalelerin özleri hem İngilizce, hem Türkçe yayınlanır. Her iki dildeki özler yazarlardan istenir.

Yazıların Hazırlanması

Aksi belirtilmedikçe gönderilen yazılarla ilgili tüm yazışmalar ilk yazarla yapılacaktır. Gönderilen yazılar, yazının yayınlanmak üzere gönderildiğini ve Bağcılar Tıp Bülteni'nin hangi bölümü (Orijinal Araştırma, Kısa Araştırma, Olgu Sunumu, Derleme, Editöre Mektup) için başvurulduğunu belirten bir mektup, yazının elektronik formunu içeren Microsoft Word 2003 ve üzerindeki versiyonları ile yazılmış elektronik dosya ile tüm yazarların imzaladığı 'Telif Hakkı Devir Formu', Yazar Katkı Formu ve ICMJE Potansiyel Çıkar Çatışması Beyan Formueklenerek gönderilmelidir. Yazıların alınmasının ardından yazarlara makalenin alındığı, bir makale numarası ile bildirilecektir. Tüm yazışmalarda bu makale numarası kullanılacaktır. Makaleler sayfanın her bir kenarından 2,5

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cm kenar boşluğu bırakılarak ve çift satır aralıklı yazılmalıdır. Makalelerde aşağıdaki sıra takip edilmelidir ve her bölüm yeni bir sayfa ile başlamalıdır: 1) başlık sayfası, 2) öz, 3) metin, 4) teşekkür / 5) kaynaklar ve 6) tablo ve/veya şekiller. Tüm sayfalar sırayla numaralandırılmalıdır.

Başlık

Başlık sayfasında, yazarların adları, akademik ünvanları ve yazışılacak yazarın tam adres, telefon ve faks numaraları ile e-mail adresi mutlaka bulunmalıdır. Yazıların Türkçe özlerinde mutlaka Türkçe başlık da yer almalıdır.

Öz ve Anahtar Sözcükler

Makalenin İngilizce başlığı İngilizce özde, Türkçe başlığı da Türkçe özde yer almalıdır. Bütün makaleler öz ve anahtar kelime içermelidir. Özler bir makalenin birçok elektronik veri tabanında yer alan en belirgin kısmı olduğundan, yazarlar özün makalenin içeriğini doğru olarak yansıttığından emin olmalıdır. Öz çalışmanın temeliyle ilgili bilgi vermeli ve çalışmanın amacını, temel prosedürleri (olguların ya da laboratuvar hayvanlarının seçimi, gözlemsel ve analitik yöntemler), ana bulguları (mümkünse özgül etki büyüklüklerini ve istatistiksel anlamlılıklarını vererek) ve temel çıkarımları içermelidir. Çalışmanın ya da gözlemlerin yeni ve önemli yönleri belirtilmelidir. Anahtar sözcükler, her türlü yazıda Türkçe ve İngilizce özlerin altındaki sayfada 3-10 adet verilmelidir. Anahtar sözcük olarak National Library of Medicine'ın Tıbbi Konu Başlıkları'nda (Medical Subject Headings, MeSH) yer alan terimler kullanılmalıdır. MeSH'de yer alan terimlerin Türkçe karşılıklarına Türkiye Bilim Terimleri'nden http://www.bilimterimleri.com erişilebilir.

Makale Türleri

Orijinal Araştırma

Orijinal araştırma makaleleri derginin kapsamına uygun konularda önemli, özgün bilimsel sonuçlar sunan araştırmaları raporlayan yazılardır. Orijinal araştırma makaleleri, Öz, Anahtar Kelimeler, Giriş, Yöntem ve Gereçler, Bulgular, Tartışma, Sonuçlar, Kaynaklar bölümlerinden ve Tablo, Grafik ve Şekillerden oluşur. Öz bölümü araştırma yazılarında aşağıda belirtilen formatta yapılandırılmış olmalıdır.

Öz

Araştırma yazılarında Türkçe ve İngilizce özler en fazla 500 kelime olmalı ve şu şekilde yapılandırılmalıdır: Amaç/Objective: Yazının birincil ve asıl amacı; Yöntem ve Gereçler/Material and Method(s): Veri kaynakları, çalışmanın iskeleti, hastalar ya da çalışmaya katılanlar, görüşme/değerlendirmeler ve temel ölçümler; Bulgular/Results: Ana bulgular; Sonuç(lar)/Conclusion(s):Doğrudan klinik uygulamalar, çıkartılacak sonuçlar belirtilmelidir.

Anahtar Kelimeler

National Library of Medicine'ın Tıbbi Konu Başlıkları'nda (MedicalSubjectHeadings, MeSH) yer alan terimler kullanılmalıdır, en az üç anahtar kelime belirtilmelidir.

Giriş

Giriş/Introduction bölümünde konunun önemi, tarihçe ve bugüne kadar yapılmış çalışmalar, hipotez ve çalışmanın amacından söz edilmelidir. Hem ana hem de ikincil amaçlar açıkça belirtilmelidir. Sadece gerçekten ilişkili kaynaklar gösterilmeli ve çalışmaya ait veri ya da sonuçlardan söz edilmemelidir.

Yöntem ve Gereçler

Yöntem ve Gereçler/Material and Methods bölümünde, veri kaynakları, hastalar ya da çalışmaya katılanlar, ölçekler, görüşme/değerlendirmeler ve temel ölçümler, yapılan işlemler ve istatistiksel yöntemler yer almalıdır. Yöntem bölümü, sadece çalışmanın planı ya da protokolü yazılırken bilinen bilgileri içermelidir; çalışma sırasında elde edilen tüm bilgiler bulgular kısmında verilmelidir. Yöntem ve Gereçler bölümünde olguların seçimi ve tanımlanması hakkında bilgi, teknik bilgi ve istatistik hakkında bilgi yer almalıdır. Araştırmanın Etik Kurul Onayı ve katılımcılardan alınan yazılı Bilgilendirilmiş Onam belirtilmelidir.

Olguların Seçimi ve Tanımlanması

Gözlemsel ya da deneysel çalışmaya katılanların (hastalar, hayvanlar, kontroller) seçimi, kaynak popülasyon, çalışmaya alınma ve çalışmadan dışlanma ölçütleri açıkça tanımlanmalıdır. Yaş ve cinsiyet gibi değişkenlerin çalışmanın amacıyla olan ilişkisi her zaman açık olmadığından yazarlar çalışma raporundaki kullanımlarını açıklamalıdır; örneğin yazarlar niçin sadece belli bir yaş grubunun alındığını ya da neden kadınların çalışma dışında bırakıldığını açıklamalıdır. Çalışmanın niçin ve nasıl belli bir şekilde yapıldığı açık bir şekilde belirtilmelidir. Yazarlar etnisite ya da ırk gibi değişkenler kullandıklarında bu değişkenleri nasıl ölçtüklerini ve geçerliklerini açıklamalıdır.

Teknik Bilgi

Diğer çalışmacıların sonuçları yineleyebilmesi için yöntem ve kullanılan araçlar (üretici firma ve adres paragraf içinde belirtilerek) ayrıntılı bir şekilde belirtilmelidir. Önceden kullanılan bilinen yöntemler için (istatistiksel yöntemler dahildir) kaynak gösterilmeli, basılmış ama iyi bilinmeyen bir yöntem için kaynak verilmeli ve yöntem açıklanmalıdır. Aynı şekilde yeni ya da belirgin olarak modifiye edilmiş yöntemler tanımlanmalı ve kullanılma nedenleri belirtilip kısıtlılıkları değerlendirilmelidir. Kullanılan tüm ilaç ve kimyasallar doğru olarak tanımlanıp jenerik isimleri, dozları ve kullanım biçimleri

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belirtilmelidir. Gözden geçirme yazısı gönderen yazarlar veriyi bulma, seçme, ayırma ve sentezleme yöntemlerini belirtmelidir. Bu yöntemler aynı zamanda özde de yer almalıdır.

İstatistik

İstatistiksel yöntem, orijinal veriye erişebilecek bilgili bir okuyucunun rapor edilen sonuçları onaylayabileceği bir ayrıntıda belirtilmelidir. Mümkünse, bulgular niceliksel hale getirilmeli ve hata ölçümleri (güvenlik aralıkları gibi) sunulmalıdır. Etki büyüklüğünü vermeyen, p değerlerinin kullanımı gibi, salt istatistiksel hipotez sınamasına dayanılmamalıdır. Çalışma deseni ve istatistiksel yönteme dair kaynaklar sayfalar belirtilerek mümkün olduğu sürece standart kaynaklar olmalıdır. İstatistiksel terimler, kısaltmalar ve semboller tanımlanmalıdır. Kullanılan bilgisayar programı belirtilmelidir.

Bulgular

Ana bulgular istatistiksel verilerle desteklenmiş olarak eksiksiz verilmeli ve bu bulgular uygun tablo, grafik ve şekillerle görsel olarak da belirtilmelidir. Bulgular yazıda, tablolarda ve şekillerde mantıklı bir sırayla önce en önemli sonuçlar olacak şekilde verilmelidir. Tablo ve şekillerdeki tüm veriyi yazıda vermemeli, sadece önemli noktaları vurgulanmalıdır. Ekstra materyal ve teknik bilgi ek kısmında verilerek yazının akışının bozulmaması sağlanmalı, alternatif olarak bunlar sadece elektronik versiyonda yer almalıdır.

Tartışma

Tartışma/Discussion bölümünde o çalışmadan elde edilen veriler, kurulan hipotez doğrultusunda hipotezi destekleyen ve desteklemeyen bulgular ve sonuçlar irdelenmeli ve bu bulgu ve sonuçlar literatürde bulunan benzeri çalışmalarla kıyaslanmalı, farklılıklar varsa açıklanmalıdır. Çalışmanın yeni ve önemli yanları ve bunlardan çıkan sonuçları vurgulanmalıdır. Giriş ya da sonuçlar kısmında verilen bilgi ve veriler tekrarlanmamalıdır.

Sonuçlar

Sonuçlar/Conclusions bölümünde çalışmadan çıkarılan sonuçlar sıralanmalıdır. Deneysel çalışmalar için tartışmaya sonuçları kısaca özetleyerek başlamak, daha sonra olası mekanizmaları ya da açıklamaları incelemek ve bulguları önceki çalışmalarla karşılaştırmak, çalışmanın kısıtlılıklarını özetlemek, gelecekteki çalışmalar ve klinik pratik için uygulamalarını belirtmek faydalıdır. Varılan sonuçlar çalışmanın amacıyla karşılaştırılmalı, ancak elde edilen bulgular tarafından yeterince desteklenmeyen çıkarımlardan kaçınılmalıdır. Yazarlar, eğer elde ettikleri veriler ekonomik veri ve analizler içermiyorsa, ekonomik çıkar ya da faydalarla ilgili yorumlardan özellikle kaçınılmalıdır. Gerektiğinde yeni hipotezler ortaya konmalı, ancak bunların yeni hipotezler olduğu belirtilmelidir.

Tablo, Grafik ve Şekiller

Yazı içindeki grafik, şekil ve tablolar Arap sayıları ile numaralandırılmalıdır. Şekillerin metin içindeki yerleri belirtilmelidir. Ayrıntılı bilgi aşağıda ilgili başlık altında yer almaktadır.

Kısa Araştırma

Kısa Araştırma makaleleri tarz ve format açısından Orijinal Araştırma makaleleri gibidir; ancak daha küçük ölçekli araştırmaları ya da geliştirme çalışmasının erken aşamalarında olan araştırmaları ele alır. Basit araştırma tasarımı kullanan ön çalışmalar, sınırlı pilot veri sağlayan küçük örnek kitle ile yapılan çalışmalar, ileri araştırma gereksinimine işaret eden başlangıç bulguları bu tür araştırmalar kapsamında sayılabilir. Kısa Araştırma makaleleri, büyük ölçekli gelişkin araştırma projelerini konu alan Orijinal Araştırma makalelerinden daha kısadır. Ancak Kısa Araştırma, Orijinal Araştırma makalesi olabilecek kalitede bir araştırma makalesinin kısa versiyonu olarak anlaşılmamalıdır; önem derecesi düşük, titizlikle yapılmamış bir araştırma hakkında bir yayın malzemesi hazırlamak için kullanılmamalıdır ya da genişletildiğinde Orijinal Araştırma makalesi ya da araştırma niteliği kazanmayacak bir içeriği değerlendirecek bir makale türü olarak anlaşılmamalıdır.

Olgu Sunumu

Olgu sunumu makaleleri özgün vakaları rapor eden yazılardır. Derginin kapsamına giren konulara ilişkin bir problemin üstesinden gelen tedaviyle ilgili, yeni araçlar, teknikler ve metotlar göstererek okuyucular için bilgilendirme sağlamalıdır. Olgu sunumu yazıları Öz (özün araştırma makalesinde olduğu gibi belli bir formatta yapılandırılmış olması gerekmiyor), Anahtar Kelimeler, Giriş, Olgu Sunumu, Tartışma, Referanslar, gerekirse Tablo ve açıklayıcı bilgilerden oluşur. Olgu sunumunda yazılı bilgilendirilmiş onam alınmalı ve makalede belirtilmelidir.

Derleme

Derleme makaleleri alanında zengin birikime ve atıf alan çalışmalara sahip uzman kişilerce yazılan yazılardır. Klinik pratiğe ilişkin bir konuda mevcut bilgiyi tanımlayan, değerlendiren ve tartışan; geleceğe ilişkin çalışmalara yol gösteren derleme yazıları yazmaları için dergi belirlediği yazarlara davet gönderir. Derleme makaleleri, Öz (özün, araştırma makalesinde olduğu gibi belli bir formatta yapılandırılmış olması gerekmiyor), Anahtar Kelimeler, Giriş, Sonuç bölümlerinden oluşur. Derleme makale gönderen yazarların, makalede kullandıkları verinin seçimi, alınması, sentezi için kullandıkları yöntemleri tanımlayan bir bölüme de makalede yer vermeleri gerekir. Bu yöntemler Öz bölümünde de belirtilmelidir.

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Editöre Mektup

Editöre Mektup, kısa ve net görüş bildiren yazılardır. Dergide daha önce yayınlanmış olan makalelerle ilgili olarak ya da dergide ifade edilmiş görüşlerle ilgili olarak yazılmış olması tercih edilir. Editöre Mektup yazıları, daha sonra yeni bir yazı ile geçerlilik ispatı gerektirebilecek ön görüş bildiren yazılar olmamalıdır.

Tablolar

Tablolar bilgileri etkin bir şekilde gösterir ve ayrıca bilginin istenen tüm ayrıntı seviyelerinde verilmesini sağlar. Bilgileri metin yerine tablolarda vermek genelde metnin uzunluğunu kısaltır.

Her tablo ayrı bir sayfaya çift aralıklı olarak basılmalıdır. Tablolar metindeki sıralarına göre numaralanıp, her birine kısa bir başlık verilmelidir. MS Word 2003 ve üstü versiyonlarında otomatik tablo seçeneğinde "tablo klasik 1" ya da "tablo basit 1" seçeneklerine göre tablolar hazırlanmalıdır. Başlık satırı ve tablo alt üst satırları dışında tablonun içinde başka dikey ve yatay çizgiler kullanılmamalıdır. Her sütuna bir başlık verilmelidir. Yazarlar açıklamaları başlıkta değil, dipnotlarda yapmalıdır. Dipnotlarda standart olmayan tüm kısaltmalar açıklanmalıdır. Dipnotlar için sırasıyla şu semboller kullanılmalıdır: (*,†,‡,§,ǁ,¶,**,††,‡‡).

Varyasyonun standart sapma ya da standart hata gibi istatistiksel ölçümleri belirtilmelidir. Metin içinde her tabloya atıfta bulunulduğuna emin olunmalıdır. Eğer yayınlanmış ya da yayınlanmamış herhangi başka bir kaynaktan veri kullanılıyorsa izin alınmalı ve onlar tam olarak bilgilendirilmelidir. Çok fazla veri içeren tablolar, çok yer tutar ve sadece elektronik yayınlar için uygun olabilir ya da okuyuculara yazarlar tarafından doğrudan sağlanabilir. Böyle bir durumda uygun bir ifade metne eklenmelidir. Bu tip tablolar, hakem değerlendirmesinden geçmesi için makaleyle beraber gönderilmelidir.

Şekiller

Şekiller ya profesyonel olarak çizilmeli ve fotoğraflanmalı ya da fotoğraf kalitesinde dijital olarak gönderilmelidir. Şekillerin basıma uygun versiyonlarının yanı sıra JPEG ya da GIF gibi elektronik versiyonlarda yüksek çözünürlükte görüntü oluşturacak biçimlerde elektronik dosyaları gönderilmeli ve yazarlar göndermeden önce bu dosyaların görüntü kalitelerini bilgisayar ekranında kontrol etmelidir.

Röntgen, CT, MRI filmleri ve diğer tanısal görüntülemeler yüksek kalitede basılmış olarak gönderilmelidir. Bu nedenle şekillerin üzerindeki harfler, sayılar ve semboller açık ve tüm makalede eşit ve yayın için küçültüldüklerinde bile okunabilecek boyutlarda olmalıdır. Şekiller mümkün olduğunca tek başlarına anlaşılabilir olmalıdır. Fotomikrografik patoloji preparatları iç ölçekler içermelidir. Semboller, oklar ya da harfler fonla kontrast oluşturmalıdır. Eğer insan fotoğrafı kullanılacaksa, ya bu kişiler fotoğraftan tanınmamalıdır ya da yazılı izin alınmalıdır (Etik bölümüne bakınız).

Şekiller metinde geçiş sıralarına göre numaralandırılmalıdır. Eğer önceden yayınlanmış bir şekil kullanılacaksa, yayın hakkını elinde bulunduran bireyden izin alınmalıdır. Toplum alanındaki belgeler hariç yazarlığa ve yayıncıya bakılmadan bu izin gereklidir. Basılacak bölgeyi gösteren ek çizimler editörün işini kolaylaştırır. Renkli şekiller editör gerekli gördüğünde ya da sadece yazar ek masrafı karşılarsa basılır.

Şekillerin Dipnotları

Ayrı bir sayfadan başlayarak şekiller için tablo başlıkları ve dipnotları tek aralıklı olarak ve Arap sayıları ile hangi şekle karşı geldikleri belirtilerek yazılmalıdır. Semboller, oklar, sayılar ya da harfler şeklin parçalarını belirtmek için kullanıldığında, dipnotlarda her biri açıkça tanımlanmalıdır. Fotomikrografik patoloji preparatlarında iç ölçek ve boyama tekniği açıklanmalıdır.

Ölçüm Birimleri

Uzunluk, ağırlık ve hacim birimleri metrik (metre, kilogram, litre) sistemde ve bunların onlu katları şeklinde rapor edilmelidir. Sıcaklıklar Celsius derecesi, kan basıncı milimetre civa cinsinden olmalıdır. Ölçü birimlerinde hem lokal hem de Uluslararası Birim Sistemleri (International System of Units, SI) kullanılmalıdır. İlaç konsantrasyonları ya SI ya da kütle birimi olarak verilir, alternatif olarak parantez içinde de verilebilir.

Kısaltmalar ve semboller sadece standart kısaltmaları kullanın, standart olmayan kısaltmalar okuyucu için çok kafa karıştırıcı olabilir. Başlıkta kısaltmadan kaçınılmalıdır. Standart bir ölçüm birimi olmadıkça kısaltmaların uzun hali ilk kullanılışlarında açık, kısaltılmış hali parantez içinde verilmelidir.

Teşekkür(ler)

Yazının sonunda kaynaklardan önce yer verilir. Bu bölümde kişisel, teknik ve materyal yardımı gibi nedenlerle yapılacak teşekkür ifadeleri yer alır.

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Makale Hazırlığı :

"Bağcılar Tıp Bülteni", Tıp Dergilerinde Bilimsel Çalışmaların Yürütülmesi, Raporlanması, Düzenlenmesi ve Yayınlanmasına İlişkin yönergeleri takip eder "(Uluslararası Tıp Dergisi Editörleri Komitesi - http://www.icmje.org/). Makalenin sunulması üzerine, yazarlar deneme/araştırma türünü belirtmeli ve uygun olduğunda aşağıdaki kuralların kontrol listesini sağlamalıdır:

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Sistematik gözden geçirmeler ve meta-analizler için tercih edilen raporlama maddeleri için PRISMA (Moher D, Liberati A, Tetzlaff J, Altman DG, PRISMA Grubu. Sistematik İncelemeler ve Meta-Analizler için Tercih Edilen Raporlama Maddeleri: PRISMA Beyanı. PLoS Med 2009; 6 (7): e1000097.) (Http:// www.prisma-statement.org /),

Tanısal doğruluk çalışmalarının raporlanması için STARD kontrol listesi (Bossuyt PM, Reitsma JB, Bruns DE, Gatsonis CA, Glasziou PP, Irwig LM, vd, STARD Grubu için. Teşhis doğruluğu çalışmalarının eksiksiz ve doğru raporlanmasına yönelik: STARD girişimi, Ann Intern Med 2003; 138: 40-4.) (http://www. stard-statement.org /),

STROBE gözlemsel çalışma raporlarında yer alması gereken maddelerin kontrol listesi (http://www.strobe-statement.org /),

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CARE kuralları, vaka raporlarının doğruluğunu, şeffaflığını ve kullanışlılığını artırmak için tasarlanmıştır. (Gagnier JJ, Kienle G, Altman DG, Moher D, Sox H, Riley D; CARE Grubu. CARE Yönergeleri: Konsensüs Tabanlı Klinik Vaka Raporlama Rehberinin Geliştirilmesi.) (Http://www.care-statement.org /

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Gözden geçirme yazıları okuyucular için bir konudaki kaynaklara ulaşmayı kolaylaştıran bir araç olsa da, her zaman orijinal çalışmayı doğru olarak yansıtmaz. Bu yüzden mümkün olduğunca yazarlar orijinal çalışmaları kaynak göstermelidir. Öte yandan, bir konuda çok fazla sayıda orijinal çalışmanın kaynak gösterilmesi yer israfına neden olabilir. Birkaç anahtar orijinal çalışmanın kaynak gösterilmesi genelde uzun listelerle aynı işi görür. Ayrıca günümüzde kaynaklar elektronik versiyonlara eklenebilmekte ve okuyucular elektronik literatür taramalarıyla yayınlara kolaylıkla ulaşabilmektedir.

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Raymond NC, Specker S, Eckert ED, et al. Increased mortality in bulimia nervosa and other eating disorders. Am J Psychiatry 2009;166(12):1342-1346.

MEDLINE'da yer almayan ve kısaltması olmayan dergi makalesi için: Sevinçer GM, Konuk N. Emotional eating. Journal of Mood Disorders 2013;3(4):171-178.

2. Ek sayı için:

MEDLINE'da yer alan ve kısaltması MEDLINE'a göre yapılan dergi makalesi için: Sharan P, Sundar AS. Eating disorders in women. Indian J Psychiatry 2015:57(Suppl 2):286-295.

MEDLINE'da yer almayan ve kısaltması olmayan dergi makalesi için: Maner F. Yeme bozukluklarının tedavisi. Anadolu Psikiyatri Dergisi 2009;10(Ek 1):55-56.

3. Baskıdaki makale için:

Cossrow N, Pawaskar M, Witt EA, Ming EE, Victor TW, Herman BK, et al. Estimating the prevalence of binge eating disorder in a community sample from the United States: comparing DSM-IV-TR and DSM-5 criteria. J Clin Psychiatry, 2016. (in press).

4. Kitaptan alıntılar:

Tek yazarlı kitaptan alıntı için:

McKnight TL. Obesity Management in Family Practice. 1st ed., New York:Springer, 2005:47-51.

Kitaptan bir bölüm için, editör(ler) varsa:

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Editörler aynı zamanda kitabın içindeki metin ya da metinlerin yazarı ise: Önce alınan metin ve takiben kitabın ismi yine kelimeler büyük harfle başlatılarak yazılır.

Eckel RH (editor). Treatment of obesity with drugs in the new millennium. In Obesity Mechanisms and Clinical Management. 1st ed., Philadelphia: Lippincott Williams & Wilkins, 2003:449-476.

Çeviri Kitaptan Alıntı için:

McGuffin P, Owen MJ, Gottsman II. Psikiyatri Genetiği ve Genomiği. Abay E, Görgülü Y (translation editors) 1st ed., Istanbul: Nobel Tıp Kitabevleri, 2009:303-341.

5. Tezden alıntı için:

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6. Kongre bildirileri için:

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7. Online Makale:

Kaul S, Diamond GA. Good enough: a primer on the analysis and interpretation of noninferiority trials. Ann Intern Med [Internet]. 4 Temmuz 2006 [Atıf tarihi:4 Ocak 2007];145(1):62-9. Erişim adresi:http://www.annals.org/cgi/reprint/145/1/62.pdf

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BAGCILAR MEDICAL BULLETIN
Bağcılar Tıp Bülteni

CONTENTS / İÇİNDEKİLER

ORIGINAL RESEARCH

Bagcilar Med Bull 2020;5(1):1-6
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Assessment of Knowledge, Perception About Transplantation and Life Changes in Renal Transplant Patients

Böbrek Nakli Hastalarında Transplantasyon ile İlgili Bilgi, Algılama ve Yaşam Değişikliklerinin Değerlendirilmesi

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Abstract

Objective: The objective of the study was to determine subjective factors such as adherence to treatment, knowledge levels, individual perceptions and life-style changes with a view to determine variables that could be useful for future processes in patients undergoing kidney transplant.

Method: The study was conducted in the Nephrology Department of Gaziosmanpaşa Hospital, between January 2019 and November 2019. Fifty people aged between 18-70 years who had undergone renal transplantation at least 3 months ago and were treated as outpatients by applying to the nephrology clinic were evaluated. A semi-structured questionnaire including questions about their knowledge regarding transplantation, life-style changes in the transplantation process and personal perceptions was administered to the patients.

Results: All patients expressed satisfaction with every step of the transplantation process. 32% of the patients were uncomfortable with medication and hospital visits and 44% were happy that dialysis was not in their life. 86% of the patients who underwent kidney transplantation reported increased quality of life after the operation and 36.7% stated that their sexual life changed positively. It was found that those who adhered to treatment mostly interrupted the use of medication (24%), and the sexual life of men and also patients with children were significantly affected more positively by transplantation. Those who did not receive adequate information before treatment had significantly more problems with adherence to treatment.

Conclusion: It was found that the quality of life of the patients improved significantly after kidney transplantation. Men's sexuality was affected more positively by transplantation. By endeavoring to improve patients' knowledge and perceptions prior to kidney transplantation, patient satisfaction and adherence to treatment can be significantly improved.

Keywords: Renal transplantation, knowledge, individual perception, adherence to treatment

Öz

Amaç: Bu çalışmanın amacı, böbrek nakli yapılan hastalarda gelecekteki süreçler için faydalı olabilecek değişkenleri belirlemek amacıyla tedaviye uyum, bilgi düzeyleri, bireysel algılar ve yaşam tarzı değişiklikleri gibi öznel faktörleri belirlemektir.

Yöntem: Bu çalışma Gaziosmanpaşa Hastanesi Nefroloji Bölümü'nde Ocak 2019 ve Kasım 2019 tarihleri arasında yapıldı. En az 3 ay önce böbrek nakli yapılan, nefroloji kliniğine başvurarak ayakta tedavi görmekte olan, 18-70 yaşları arasında 50 kişi çalışmaya alındı. Hastalara nakil hakkındaki bilgileri, nakil sürecindeki yaşam tarzı değişiklikleri ve kişisel algılarını içeren yarı yapılandırılmış bir anket formu uygulandı.

Bulgular: Tüm hastalar, nakil işleminin her adımından memnun olduğunu belirtti. Hastaların %32'si ilaç ve hastane ziyaretlerinden rahatsızdı ve %44'ü diyaliz yaşamlarında olmadığı için mutluydu. Böbrek nakli yapılan hastaların %86'sı ameliyat sonrası yaşam kalitesini arttırdığını bildirdi ve %36,7'si cinsel yaşamlarının olumlu yönde değiştiğini belirtti. Tedaviye bağlı olanların çoğunlukla ilaç kullanımını (%24) kesintiye uğrattığı, erkeklerin ve ayrıca çocuklu hastaların cinsel yaşantılarının transplantasyondan sonra daha olumlu etkilendiği bulundu. Tedavi öncesi yeterli bilgi alamayanların tedaviye uyumu ile ilgili olarak daha fazla problemi vardı.

Sonuç: Hastaların yaşam kalitesinin böbrek nakli sonrası anlamlı şekilde arttığı tespit edildi. Nakilden erkek cinselliği daha olumlu yönde etkilenmiştir. Hastaların böbrek nakli öncesinde bilgi ve algılarını geliştirmeye çaba göstererek, hasta memnuniyeti ve tedaviye uyum önemli ölçüde iyileştirilebilir.

Anahtar kelimeler: Böbrek nakli, bilgi, bireysel algı, tedaviye uyum

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Introduction

Chronic kidney disease is a common disease that affects life negatively and can progress to end-stage renal disease (ESRD). Renal transplantation is the gold standard treatment option in these patients, even though renal function support with external interventions (hemodialysis and peritoneal dialysis) can be provided (1). Renal transplantation has many difficulties before, during and after the operation, but it is an ultimate step in the treatment of ESRD (2). Informing renal transplant patients about the difficulties they may face in this process and providing them with realistic expectations may make it easier for them to accept changes in life-style and could increase treatment compliance and success (3). In particular, the use of immunosuppressive drugs, which are essential after transplantation, is crucial for treatment success (4).

Various studies have examined the knowledge, perception about transplantation and life changes in the treatment of kidney transplantation patients. It has been shown that inadequately informed patients are more severely affected by the slightest negativity as a result of unrealistic expectations (5). In particular, it was emphasized that lack of knowledge and heightened expectations may lead to non-adherence to immunosuppressive treatments (4). At every stage of the kidney transplantation process, from the beginning to the present state, it is necessary to ensure healthy communication with healthcare providers (6,7,8).

It is known that individual factors play an important role in the decision of transplantation and the success of treatment (9). The objective of this study was to determine subjective factors such as adherence to treatment, knowledge levels, individual perceptions and life-style changes, in order to determine variables that could be useful for future processes in patients undergoing kidney transplant.

Material and Methods

The study was approved by the İstanbul Yeniyüzyıl University Clinical Research Ethics Committee (approval no: 2018/7, date: 02.07.2018). Fifty people aged between 18-70 years who were admitted to the Nephrology Clinic of Gaziosmanpaşa Hospital between January 2019 and November 2019 were included in the study. Inclusion criteria was: having undergone renal transplantation at least 3 months ago, and being treated as outpatients at our nephrology clinic. A semi-structured questionnaire including questions about their knowledge regarding transplantation, life-style changes in the transplantation process and personal perceptions, was administered to the patients. The questionnaire was administered under supervision and it was ensured that each individual completed the questionnaire without external assistance. The completion time of the questionnaire was approximately half an hour. Patients who accepted to participate the study were included in the study after they completed the questionnaire in full.

Statistical Analysis

All analyses were performed on SPSS v21 (SPSS Inc., Chicago, IL, USA). Data given as mean ± standard deviation (minimum-maximum) for continuous variables and frequency (percentage) for categorical variables. The suitability of the numerical data for normal distribution was determined by the Shapiro-Wilk test. Pearson's chi-square test was used for comparison of categorical data and the Mann-Whitney U test was used for comparison of continuous non-distributed data. Statistically, a p value less than 0.05 was considered significant.

Results

Sociodemographic characteristics are summarized in Table 1. Twenty-four patients (48%) were diagnosed with hypertension, 10 patients (20%) were diagnosed with cardiologic problems, four patients (8%) reported nausea and vomiting. The source of the transplanted kidneys was: 12 (24%) cadaver, 10 (20%) wife/husband, 10 (20%) father, eight (16%) mother, and five (10%) non-blood-relative individuals. Time after transplantation was: less than 1 year in 20 (40%) patients, 1-3 years in nine (18%), 3-5 years in

Table 1. Summary of patients characteristics

Age (year)	40.34±13.44 (18-69)
Gender	
Female	22 (44.00%)
Male	28 (56.00%)
Working status	
Working	14 (28.00%)
Not working (because of disease)	18 (36.00%)
Not working (unrelated with disease)	18 (36.00%)
Education status	
Primary school	24 (48.00%)
High school	23 (46.00%)
University	3 (6.00%)
Disease starting age	31.18±14.97 (8-64)
Duration after diagnosis (year)	9.64±8.17 (1-38)

Data are given as mean ± standard deviation (minimum - maximum) for continuous variables and frequency (percentage) for categorical variables

six (12%), and 5-10 years in 15 (30%). Patients' knowledge and perceptions about transplantation are summarized in Table 2.

The most common causes of disturbance after transplantation were as follows: 10 (20%) of the patients were not disturbed by anything in particular, 16 (32%) were disturbed about medications and hospital visits, 13 (26%) were complaining about diet and fluid restrictions, five (10%) were worried about the disease, four (8%) stated that they were disturbed by delayed normalization of blood values and two (4%) reported that they were uncomfortable with the financial concerns. When the most positive aspects of transplantation were questioned: 22 (44%) of the patients stated that there was no more dialysis in their life, 17 (34%) stated that their health was better and their life was in order, six (12%) felt more freedom, and three (6%) stated that they had started working again. In regard to the source of family support: 24 (48%) believed their mothers assisted the most, 16 (32%) reported their wife/husband, eight (16%) reported their brothers/sisters/children.

All patients expressed satisfaction with every step of the transplantation process. The reason for hospitalization in 39 patients (78%) who stated that they were hospitalized after transplantation are as follows: persistence of renal problems (33.3%), infection (30.8%), drug side effects (15.4%), non-adherence to medication (15.4%), high creatinine values (5.13%). Among the inpatients, 14 (40.0%) had more physical activity after hospitalization, 12 (34.3%) were more careful about diet and fluid intake, nine (25.7%) reported better care for regular use of drugs. The effect of transplantation on patients is shown in Table 3.

Thirteen (29.5%) of the 44 people who thought that they were informed sufficiently about transplantation and five (83.3%) of the six people who thought that the information was not sufficient, stated that they had problems in treatment adherence. Those who reported not receiving adequate information before treatment had statistically significant problems with adherence to treatment (p=0.018). Men and people with at least one child were significantly more likely to have positive sexual life after transplantation (p<0.01). Those whose sexual life was positively affected had a significantly higher age at diagnosis (p=0.039) (Table 4). There were no statistically significant relationships between adherence problems to treatment, change in sex life, getting back to work or education, duration until achieving sufficient life quality, and the other variables measured (Table 4).

Table 2. Knowledge and opinions of patients about transplantation

Was the pre-treatment information provided to you, sufficient?	
Yes	44 (88.00%)
No	6 (12.00%)
Thoughts about organ donation	
Was positive	35 (70.00%)
Was negative	15 (30.00%)
Transplantation reason	
To be freed of dialysis	19 (38.00%)
Want to be more healthy	31 (62.00%)
To start working again	0 (0.00%)
What were your expectations regarding transplantation?	
Returning back to the same life-style before disease	17 (34.00%)
I knew that i had to use medication and visit the hospital regularly	29 (58.00%)
Don't know/no expectations	4 (8.00%)

Data are given as frequency (percentage)

Discussion

The knowledge levels and perception of patients, adherence to treatment and changes in life-style are effective on the success of kidney transplantation. In this study, 86% of the patients who underwent kidney transplantation achieved an acceptable level of life quality after the operation and 36.7% stated that their sexual life changed positively. It was found that medication interruption was the most common problem after treatment (24%), and that the sexual life of

Table 3. The effect of transplantation on patients

Compliance problems	
None	32 (64.00%)
Used drugs unregularly	12 (24.00%)
Not visited hospital in time	3 (6.00%)
Not applied diet and fluid restriction	3 (6.00%)
Change in sexual life	
Positive	18 (36.73%)
Negative	2 (4.08%)
No change	29 (59.18%)
Got back to working	20 (40.00%)
Got back to education	9 (18.00%)
Duration until they reached sufficient life quality (after operation)	
Not yet	7 (14.00%)
1 month	9 (18.00%)
2 months	6 (12.00%)
3 months	11 (22.00%)
>3 months	17 (34.00%)

Data are given as frequency (percentage)

men and also patients who had children were positively influenced by transplantation.

One of the most important results of our study was that patients who had been sufficiently informed prior to transplant had better treatment adherence. Alikari et al. (3) evaluated the level of knowledge regarding hemodialysis and adherence to treatment of chronic kidney disease patients, and organized an educational intervention to increase the level of knowledge. They stated that the level of knowledge and adherence to treatment increased with the educational intervention and this also increased patients' quality of life. In various studies, it has been shown that renal patients who are adequately informed about the disease and the process are more accepting and collaborative (10). It has been shown that not only adherence to treatment but also diet and fluid intake are influenced by the level of knowledge of patients with renal failure (11,12). Since clinicians often do not have sufficient time, they generally choose to provide information regarding the transplant at a time which is very close to the planned operation. However, informing patients within the waiting period of the transplantation list is a critical practice that can both prolong the decision-making process and increase adherence to treatment. In addition, while informing these patients, it should be noted that cognitive deficits such as memory problems may be seen in this patient group (13).

In our study, patients reported the inability to use regular medication as the most common reason of non-adherence to therapy. Nevins et al. (4) examined these causes in kidney transplant patients and stated that meticulous adherence was an undeniable key step in the success of treatment. They stated that medication adherence could be associated with many factors, such as monitoring medications (electronic monitoring), being at a young age, being a member of a minority group, inadequate social support and health care. Several studies emphasized the importance of medication adherence for the healthy progression of the transplantation process (14,15). The effect of various intervention programs on enhancing medication adherence after transplantation has been discussed in different studies and positive results have been reported (16,17). In general, interventions include face-to-face or telephone conversations with healthcare professionals on various matters, including training, motivation, questioning features that prevent drug intake, and solving problems related to any of these factors (6,7,8). Monitoring patients more closely and providing support in their time of need may have a positive influence on treatment adherence. In our study, different variables such as comorbid diseases and adverse living conditions that could affect drug adherence were not examined. In addition, incorrect interpretations may be made because drug compliance was determined by the patients' own statements.

Table 4. The difference in sexual life after transplantation

	Positive difference	No or negative difference	p
Gender			
Female	3 (13.6)	19 (86.4)	0.002
Male	15 (55.6)	12 (44.4)	
Having a child			
Yes	16 (55.2)	13 (44.8)	0.001
No	2 (10.0)	18 (90.0)	
Age at diagnosis	32.5 (22-57)	24.0 (8-64)	0.039

Data are given as median (minimum-maximum) for continuous variables and frequency (percentage) for categorical variables

It is very important to accurately understand the expectations of transplantation patients while informing them, in order to be able to shape patient expectations. In our study, one out of three patients stated that they expected to return to their pre-disease life after transplantation. Similarly, Calestani et al. (5) evaluated the expectations of patients on the kidney transplantation list and found that the majority of patients had the expectation of returning to normal life. Crawford et al. (18) stated that informing patients about difficulties and the things they should do before kidney transplantation enabled them to have a more realistic expectation about the treatment. It has been reported that patients with unrealistic expectations were psychologically affected by the difficulties encountered after transplantation and that the success of treatment was negatively affected as a result (19). Evaluating and managing the expectations of patients before and after the treatment is important for the success of treatment. In our study, pre-treatment information standardization could not be performed. For this reason, some patients may be more or less informed than others. Therefore, the lack of a standard for informing patients may have caused a bias in the assessment of results.

In our study, it was found that the sexual life of men and also patients who had children were significantly affected by transplantation. In various studies, the relationship between male sexual dysfunction and renal diseases have been shown, and it has been reported that hypogonadism may develop in about half of hemodialysis patients and testicular size may be reduced (20,21). In addition, diseases such as hypertension and depression secondary

to chronic kidney disease (22,23), and medications (24) may affect sexual functions. In men with chronic kidney disease, vascular, endocrine and neurological problems, drugs used and additional diseases may cause erectile dysfunction and affect sexual functions and reduce libido (25). Studies have shown that renal transplantation leads to endocrine recovery (26) and reduces the incidence of erectile dysfunction (26,27). In our study, it was thought that men had better sexual functions after transplantation for similar reasons. In addition, weight gain after kidney transplantation (28) and hair growth as a side effect of drugs may be increased (29). Body perception, is critical in sexual function; therefore, the possibility of obesity and hair growth increase in women after transplantation, could have negatively influenced their sex life. In our study, it was thought that a possible reason for the increased quality in the sexual life of patients who had children was associated with the fact that they were more significantly likely to be married.

In our study, more than half of the patients stated that they reached sufficient quality of life within 3 months. Kostro et al. (30) examined the quality of life of patients after renal transplantation and reported significant improvement in almost all aspects of the quality of life of all transplant patients, especially in peritoneal dialysis patients. Similarly, Balogun et al. (31) reviewed 23 previously published studies and reported that patients with ESRD had high expectations from dialysis and transplantation, in particular the quality of life of older patients was more negatively affected by kidney disease. Several different studies have also reported that renal transplantation is effective for patients to achieve a higher level of life quality compared to their pre-treatment status (32). In our study, the current life quality of patients may have been influenced by their perceptions regarding their life-style before the diagnosis of kidney disease and also the period that they were undergoing dialysis. Patients who based their expectancy onlife quality during dialysis may have been more positive about the consequences of transplantation; whereas those who referenced it with the pre-diagnosis status may have responded more negatively. It can be said that healthy communication of patients and healthcare providers has positive effects on all results examined in this study (30).

There are several limitations of this study in addition to the ones mentioned throughout the discussion. Firstly, since the data are based on patient statements, there may be subjective differences between responses. Secondly, due to the limited number of patients and lack of cross-sectional features, it is not appropriate to generalize the results. Thirdly, in some other studies, the effects of conditions such as quality of life and sexual functions were determined by standard index and scales. In this study, patient declarations were recorded directly. Finally, various additional diseases that may alter the results or other conditions that may have a positive/negative effect on life quality, were not assessed.

Conclusion

Increasing pre-treatment knowledge levels and managing the perceptions and expectations of patients planning to undergo kidney transplant can improve the adherence to treatment and critically affect treatment success. It was found that the quality of life of patients improved significantly after kidney transplantation. Men's sexuality was more positively affected by transplantation, explained by previous studies that demonstrate the negative impact of kidney diseases on male sexuality. We believe that, by endeavoring to improve patients' knowledge and perceptions prior to kidney transplantation, patient satisfaction and adherence to treatment can be significantly improved.

Ethics

Ethics Committee Approval: İstanbul Yeniyüzyıl University Clinical Research Ethics Committee (Approval no: 2018/7, date: 02.07.2018).

Informed Consent: Patients who accepted to participate the study were included in the study after they completed the questionnaire in full.

Peer-review: Internally peer-reviewed.

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ORIGINAL RESEARCH

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Pneumothorax in the ICU: Retrospective Analysis of Two Years' Experience

Yoğun Bakım Ünitesinde Pnömotoraks: İki Yıllık Retrospektif Değerlendirme

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Abstract

Objective: Pneumothorax is a common occurrence in intensive care unit (ICU)'s. Whereas causes of traumatic pneumothorax is generally blunt and penetrating traumas, iatrogenic pneumothorax may occur after procedures like central venous catheterization, positive-pressure mechanical ventilation and thoracentesis.

Method: This study evaluated the data from 69 patients diagnosed with pneumothorax and followed up and treated in the ICU between the dates 01.01.2013 and 01.01.2015. The records were used to establish the patients' age, sex, Body Mass index and cause of pneumothorax, as well as the time of insertion of chest tube, total duration of chest tube and ICU length of stay. Pneumothorax patients were evaluated in two groups based on their etiologies as Traumatic Pneumothorax group (Group T) and Iatrogenic Pneumothorax group.

Results: The pneumothorax incidence in our intensive care unit was found to be 2.53%, and all of the cases were acquired pneumothorax. Fifty-seven out of 69 cases were traumatic, most having developed bilaterally compared to the cases in the iatrogenic group, diagnosed with Computerized Tomography of Thorax and had a higher rate of thoracentesis. In Group T, chest tube was inserted earlier and mechanical ventilation duration and ICU length of stay were shorter.

Conclusion: Pneumothorax is one of main emergency events in ICU patients. Even though it is rare, it should be diagnosed early. Our study confirms that pneumothorax in ICU is always acquired and mostly traumatic. Traumatic pneumothorax is associated with shorter mechanical ventilation duration and shorter ICU length of stay compared to iatrogenic pneumothorax.

Keywords: Pneumothorax, traumatic, iatrogenic, intensive care unit

Öz

Amaç: Pnömotoraksa yoğun bakım ünitelerinde (YBÜ) sıklıkla rastlanır. Travmatik pnömotoraks sebepleri, genellikle künt ve penetran travmalar iken, iatrojenik pnömotoraks santral venöz kateterizasyon, pozitif basınçlı mekanik ventilasyon ve torasentez gibi işlemler sonrası meydana gelebilmektedir.

Yöntem: Bu çalışmada, YBÜ, 01.01.2013 ile 01.01.2015 tarihleri arasında pnömotoraks tanısı alarak takip ve tedavi edilen toplam 69 hastanın bilgileri değerlendirildi. Hastaların yaş, cinsiyet, Vücut Kitle indeksi ile pnömotoraks nedeni, tarafı, göğüs tüpünün takılma zamanı, göğüs tüpü toplam kalış süresi, YBÜ kalış süresi açısından kayıtlar değerlendirildi. Pnömotoraks hastaları etiyolojilerine göre Travmatik Pnömotoraks grubu (Group T) ve Iatrogenic pnömotoraks grubu olarak incelendi.

Bulgular: YBÜ'de pnömotoraks insidansı %2,43 saptandı ve olguların tümü kazanılmış pnömotoraks idi. Olguların 57/69'u travmatik olup, iatrojenik gruptakilere göre, çoğu bilateral gelişmiş, tanıda toraks kompütörize tomografisi kullanılmış ve torasentez sıklığı daha fazla idi. grup T'de göğüs tüpü daha hızlı yerleştirilmişti. Mekanik ventilasyon süresi ve YBÜ'de kalma zamanı grup T'de daha kısaydı.

Sonuç: Pnömotoraks YBÜ'de yatan hastalarda görülen başlıca acil olgulardan biridir. Nadir olmasına rağmen erken teşhis edilmelidir. Çalışmamız, YBÜ'de görülen pnömotoraksın her zaman edinilmiş olduğunu ve çoğunun travmatik olduğunu doğrulamaktadır. Travmatik pnömotoraks grubunda mekanik ventilasyon süresi ve YBÜ'de kalış süresi iatrojenik pnömotoraks grubuna kıyasla daha kısadır.

Anahtar kelimeler: Pnömotoraks, travmatik, iatrojenik, YBÜ

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Introduction

Pneumothorax is categorized into two main groups as spontaneous and traumatic origin (1). Spontaneous pneumothorax is seen in people with or without an underlying respiratory condition and without a trauma history. It is also divided into two subgroups as primary and secondary spontaneous pneumothorax. Primary spontaneous pneumothorax develops in young and healthy individuals with no known Pulmonary disease. Secondary spontaneous pneumothorax, on the other hand, is a complication of an underlying pulmonary pathology (e.g. chronic obstructive pulmonary disease, cystic fibrosis, interstitial lung disease, etc.) (2,3) (Table 1).

Pneumothorax is a common occurrence in intensive care units (ICUs). Most pneumothorax cases in ICUs (70%) are traumatic. Whereas causes of traumatic pneumothorax are generally blunt and penetrating traumas, iatrogenic pneumothorax may generally occur after procedures like central venous catheterization (CVC), positive-pressure mechanical ventilation (PPMV) and thoracentesis (4,5). Incidence of iatrogenic pneumothorax in critical ICU patients is 4-15%, and it is one of the serious complications of PPMV (5,6).

Material and Methods

This study retrospectively examined the records of total of 2.839 patients followed up and treated in the Anesthesiology and Reanimation Clinic ICU of our hospital between the dates 01.01.2013 and 01.01.2015 having obtained local ethics committee approval. From among the patients admitted to the hospital within said two-year period, the study included the data of 69 patients (22 female and 47 male patients) who were diagnosed with J-93: Pneumothorax, J-94: Other Pleural Conditions, S-21: Open Wound of Thorax, and S-27: Injury of Other and Unspecified Intrathoracic Organs based on the ICD-10 diagnosis codes in the hospital's information system.

Table 1. Pneumothorax classification and causes

Pneumothorax		
Spontaneous	Primary	Subpleural bleb rupture, Bullous rupture
	Secondary	COPD, Tuberculosis, Necrotizing pneumonia, Malignancy, Interstitial Lung disease, Cystic fibrosis
Acquired	Traumatic	Blunt trauma, Penetrating trauma, Barotrauma
	Iatrogenic	Central venous cannulation, Pleural biopsy, Transbronchial biopsy, Transthoracic needle aspiration biopsy, Thoracentesis, Mechanical ventilation

COPD: Chronic Obstructive Pulmonary disease

The study evaluated the patients' age, sex, height, body weight, Acute Physiology and Chronic Health Evaluation (APACHE)-II score and causes of pneumothorax, as well as radiological diagnostic methods [chest X-ray, computed tomography of thorax (CToT)], presence of thoracentesis, time of post-diagnosis chest tube insertion (hour), and total duration of chest tube (day). The study also evaluated the records in terms of whether patients needed mechanical ventilator as well as mechanical ventilation durations, ICU lengths of stay, and mortality.

Statistical Analysis

Statistical analyses were conducted using NCSS (Number Cruncher Statistical System) 2007 Statistical Software (Utah, USA) package program. In addition to descriptive statistical methods (mean ± standard deviation) used to evaluate the data, the study utilized independent t-test to compare binary groups and the chi-square test to compare qualitative data. The results were evaluated according to significance level of $p<0.05$.

Results

Demographic data of the patients are given in Table 2. In none of the cases was spontaneous pneumothorax found to be the etiology of pneumothorax. Pneumothorax etiology was acquired pneumothorax in all of 69 patients. Causes of admissions to ICU of traumatic pneumothorax patients (n=57) and iatrogenic pneumothorax patients (n=12) are given in Table 3.

ICU lengths of stay of patients were higher in Iatrogenic Pneumothorax group (group I) than Traumatic Pneumothorax group (group T). The thoracic tube was inserted earlier group T compared to group I. ICU data of acquired pneumothorax patients are given in Table 4. ICU lengths of stay of patients were higher in group I than group T. The thoracic tube was inserted earlier group T compared to group I.

Discussion

The data of this study includes the pneumothorax cases followed up in the ICU. It was found out that acquired pneumothorax was the etiology in all of the patients. The reason for this may be the absence of pulmonary diseases Clinic and Chest Surgery Clinic in our hospital and the referral of primary spontaneous pneumothorax and secondary spontaneous pneumothorax patients to branch hospitals by the emergency service or the emergency assistance command center. Records of 69 out of 2.838 patients admitted to the ICU showed pneumothorax diagnosis. Based on such data, it was found out that the pneumothorax incidence in our ICU was 2.43%. The body of literature shows that ICU pneumothorax incidence is 5-12% (7). The reason why the incidence is lower in our study may be attributable to omitting to check off pneumothorax in the diagnosis codes searched during the retrospective scanning.

All of the cases in our ICU were acquired pneumothoraxes. Acquired pneumothoraxes are categorized in two groups: traumatic and iatrogenic. Traumatic pneumothorax develops in 15-20% of the patients exposed to blunt trauma (8). Mortality rate in traumatic pneumothoraxes is 26.32%. On the other hand, the likelihood of bilateral pneumothorax in thoracic traumas is only 3%; however, the mortality is higher than in unilateral pneumothorax

Table 2. Demographic data and side of pneumothorax

		Group T (n=57)	Group I (n=12)	p
Age (year)		30.16±18.93	40.17±19.32	0.102
Gender	**Male**	37 64.91%	10 83.33%	0.213
	Female	20 35.09%	2 16.67%	
Height (cm)		154.19±30.25	160.67±22.6	0.487
Weight (kg)		64.79±25.3	71.58±16.74	0.378
APACHE II score		21.23±5.32	23.16±5.84	0.108
Side of pneumothorax (R/L/RL)		R=22	R=9	**0.046**
		L=22	L=3	
		RL=13	RL=0	
Radiological diagnostic method (chest X-ray, CToT)		Chest X-ray=2	Chest X-ray=6	**0.039**
		CToT=37	CToT=2	
		Both=18	Both=4	
Presence of thoracentesis for diagnosis		13 (22.81%)	3 (25%)	0.091

APACHE: Acute physiology and chronic health evaluation, R: Right, L: Left, RL: Bilaterally, CToT: Computed tomography of thorax, Group T: Traumatic Pneumothorax group, Group I: Iatrogenic Pneumothorax group

Table 3. Causes of acquired pneumothorax in intensive care unit

Pneumothorax		
Spontaneous (n=0)	Primary (n=0)	
	Secondary (n=0)	
Acquired (n=69) (100%)	**Group T (n=57)** (82.61%)	Traffic accident (n=19), Stab wounds (n=10), Firearm injury (n=3), Polytrauma (n=23) Barotrauma (n=1), CPR-Chest compression (n=1)
	Group I (n=12) (17.39%)	Central venous cannulation (n=8), Thoracentesis (n=3), ARDS-Mechanical ventilation support (n=1)

CPR: Cardiopulmonary resuscitation, ARDS: Acute Respiratory Distress syndrome, Group T: Traumatic Pneumothorax group, Group I: Iatrogenic Pneumothorax group

Table 4. Data of the patients in ICU

	Group T (n=57)	Group I (n=12)	p
Chest tube insertion time (hour)	1.11±0.38	5.33±5.3	**0.0001**
Duration of chest tube drainage (day)	8.04±4.01	7.17±4.41	0.511
Duration of mechanical ventilation (day)	12.53±18.53	24.25±40.15	**0.03**
ICU stay (day)	15.46±19.79	32.5s±39.33	**0.02**
Mortality	15 (26.32%)	6 (50%)	0.105

ICU: Intensive Care Unit, Group T: Traumatic Pneumothorax group, Group I: Iatrogenic Pneumothorax group

(9). In our cases, incidence of bilateral pneumothorax was higher. This resulted from the fact that the etiology of most of our cases was injuries associated with polytrauma. The treatment modality in traumatic pneumothoraxes depends on the clinical status of the patient, the severity of the pneumothorax, time of occurrence of the trauma, whether the patient will require support ventilator, or whether the patient will receive anesthesia (10). It is clear that a pneumothorax that might be overlooked when a patient who has had a trauma has additional conditions will dramatize the situation even more (11). Therefore, it not a preferable method to stay conservative and to not follow up the patient in the presence of a pneumothorax in trauma patients (12). Chest tube duration and ICU length of stay in the case of the patients inserted with a chest tube due to traumatic pneumothorax were longer compared to iatrogenic pneumothorax.

Chest X-ray is the first choice as an imaging technique for the diagnosis of pneumothorax (13). Expiratory films and lateral decubitus films are not recommended as a routine. However, the literature recommends these films in case of a highly suspected pneumothorax in patients with normal anterior-posterior chest X-rays (14). Nevertheless, CToT provides a definitive diagnosis in undiagnosed cases (15). In the patients scanned retrospectively, combination of chest X-ray and CToT was more common as the first diagnostic imaging method. This is because most of the patients had polytrauma and scanning of all cavities with computed tomography was a routine method of diagnosis.

In our study, 17.39% of all ICU pneumothorax cases were iatrogenic pneumothorax. Sassoon et al. (16) determined the causes of iatrogenic pneumothorax as transthoracic needle biopsy, CVC and thoracentesis in the order of incidence. The most common cause of iatrogenic pneumothorax in ICUs is CVC (17). When deciding on the side to be catheterized, it should be carefully evaluated by examining the preoperative chest X-ray whether there are any apical bullae, rib and clavicula anomalies and Chronic Obstructive Pulmonary disease. Catheterization of the side of the hemithorax on which it is planned to operate in patients that will undergo thoracic surgery and catheterization of the traumatic hemithorax in patients that have had a thoracic trauma aim to protect against the risk of iatrogenic pneumothorax (18). Pneumothorax associated with CVC is more common in the right hemithorax (19). In our study, it was detected that the right hemithorax involvement was higher in iatrogenic pneumothorax cases. This is mainly because the central veins associated with the right hemithorax are preferred for CVC in the absence of any contraindication, which is easier, more ergonomic and more customary (20). CVC may not be easy to perform due to several reasons like anatomic differences, obesity, hypovolemia and vascular pathologies or lack of experience (21). Recurring punctures increases the likelihood of complications (22). It is pointed out that, in relation to occurrence of pneumothorax after invasive interventions, the experience of the operating doctor is important, risk of complication decreases with increasing experience, thus residents need to perform invasive operations under the supervision of specialists throughout their training (23). Today, vascular puncture has become easier during CVC with use of ultrasound devices in ICUs, with a decrease in complications like pneumothorax (24). Even though a chest X-ray taken at the end of expiration can be a guide when making a diagnosis, Molgaard et al. (25) reported that routine chest X-rays are not valuable for early diagnosis in their study on 473 CVC cases analyzed in relation to pneumothorax. All patients' posterior-anterior chest X-rays are obtained after they undergo a CVC in our ICU. In case of iatrogenic pneumothorax, partial pneumothorax may progress into total pneumothorax and even tension pneumothorax, leading to sudden death when PPMV is applied in the absence of onset symptoms. Despars et al. (26) reported that two out of 98 patients who developed iatrogenic pneumothorax died of this reason and one patient who could not be diagnosed with pneumothorax developed tension pneumothorax. In our iatrogenic pneumothorax cases, the total mortality rate was found to be 50%. This was attributed to the comorbidities of the patients. We found out that, out of six iatrogenic pneumothorax cases that resulted in exitus, one had a post-cardiac arrest, one had lung cancer, one had esophageal cancer, and one was monitored in our ICU due to traffic accident-polytrauma. Since the patients with said diagnoses had high APACHE-II scores, the expectancy of mortality was also extremely high.

In our study, it was found out that ICU lengths of stay of patients were higher in the Group I than the Group T. Another statistically significant difference between the two groups was the time of insertion of thoracic tube. The thoracic tube was inserted earlier in the traumatic cases compared to the iatrogenic cases. This was because the traumatic cases had already had pneumothorax at the time they were first admitted to the ICU and the iatrogenic cases developed pneumothorax after they spent certain amount of time in the ICU (on the day of the interventional

procedure). Another significant difference was the localization of the pneumothorax. Whereas the location of the thoracic tube was the right side in 22, the left side in 22 and the bilateral sides in 13 cases in the traumatic group, 9 cases had pneumothorax in the right side, 3 had pneumothorax in the left side and no cases had bilateral pneumothorax in the iatrogenic group. The main reason for this difference is that traumatic pneumothorax can involve either of or both hemithoraces depending on the trauma whereas iatrogenic cases are limited to the side which is operated on.

Limitations of our study included its retrospective study design, limited number of cases, study population limited to critical illness patient, study setting in a single center's ICU, and possibility of diagnostic records deficiency in hospital data system.

Conclusion

In conclusion, pneumothorax is one of the most frequent emergencies encountered in ICUs (27). Therefore, doctors of ICU should know well what to pay attention to in pneumothorax patient management (diagnosis, follow-up, treatment) (28). Performance of invasive operations by experienced personnel will result in less frequent occurrence of iatrogenic pneumothorax cases.

Ethics

Ethics Committee Approval: This study retrospectively examined the records of total of 2.839 patients followed up and treated in the Anesthesiology and Reanimation Clinic ICU of our hospital between the dates 01.01.2013 and 01.01.2015 having obtained local ethics committee approval.

Informed Consent: Written consent was obtained.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Concept: A.Ö., K.E., M.S.S., Design: S.D., M.S.S., S.D., Data Collection or Processing: F.G.Ö., K.E., A.S., Analysis or Interpretation: A.Ö., S.D., A.S., Literature Search: A.Ö., M.W., M.S.S., Writing: A.Ö., A.S.

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ORIGINAL RESEARCH

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Evaluation of Long-term Intensive Care Patients in a Cardiac Surgery Center

Kalp Cerrahisi Merkezinde Uzayan Yoğun Bakım Hastalarının Değerlendirilmesi

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Abstract

Objective: This study was aimed to evaluate the clinical and demographic characteristics of patients in a chronic intensive care unit (ICU) in a cardiac surgery center and to research the effect of these characteristics on scoring systems used.

Method: From 1 September 2014 to 1 September 2019, the study was performed retrospectively with cases admitted to the chronic ICU due to lengthened intensive care requirements after monitoring in the cardiovascular surgery intensive care or coronary ICU. Each case had study forms including information like age, gender, comorbid diseases, acute physiology and chronic health evaluation 2 (APACHE 2) scores, Glasgow Coma scale, the results were statistically assessed.

Results: Two hundred and sixty three patients were enrolled for this study. The mean age of patients was 64.6±6 years, with 61% male and 39% female. Of cases, 46% had coronary bypass surgery (n=122), 25% had valve + aorta dissection (n=67), 19% had acute coronary artery (n=51) and 7% had peripheral artery disease (n=17). The mean follow-up duration for patients was identified as 44.2±96.38 days. Cases developing mortality had significantly higher APACHE 2 scores compared to cases without mortality (p<0.05, 24.9±8.0 vs 20.5±7.2). The most common comorbidities in cases were kidney failure in 41% (n=48). Sixty-nine cases had a percutaneous tracheostomy and 21 cases had a surgical tracheostomy, for a total of 90 cases with a tracheostomy.

The mortality rate of entire monitored patients during this study period was 42.6%.

Conclusion: Very different problems may be encountered in cases observed in the chronic ICU. For these cases, kidney failure is the most

Öz

Amaç: Bu çalışmada kalp cerrahisi merkezinde, kronik yoğun bakım ünitesinde yatan hastaların klinik ve demografik özelliklerinin değerlendirilmesi ve bu özelliklerin kullanılan skorlama sistemlerine olan etkisinin araştırılması amaçlandı.

Yöntem: 1 Eylül 2014-1 Eylül 2019 tarihleri arasında retrospektif olarak kardiyovasküler cerrahi yoğun bakım veya koroner yoğun bakım ünitesinde izlenip yoğun bakım sürecinin uzaması nedeniyle kronik yoğun bakım ünitesine alınan olgularda gerçekleştirildi. Her bir olgunun yaş, cinsiyet, eşlik eden hastalık, Akut Fizyoloji ve Kronik Sağlık Değerlendirmesi 2 (APACHE 2) skorları, Glasgow Koma skalası, bilgileri içeren çalışma formu oluşturuldu. Sonuçlar istatistiksel olarak değerlendirildi.

Bulgular: İki yüz altmış üç hasta çalışmaya alınmıştır. Hastaların ortalama yaşları 64,6±6 yıl olup, %61'i erkek %39'u kadındı. Olguların %46'una koroner bypass (n=122) cerrahisi, %25'ine kapak + aort diseksiyonu (n=67) %19 akut koroner arter sonrası (n=51) %7'si periferik arter hastalığı (n=17) sonrası izlenmişti. Hastaların takip süresi ortalama 44,2± 96,38 gün olarak saptanmıştı. Mortalite gelişen olgularda, mortalite gelişmeyen olgulara göre APACHE 2 skoru anlamlı olarak daha yüksekti (p<0,05 24,9±8,0 vs 20,5±7,2). Olgularda en sık gözlenen komorbidite %41 (n=48) Böbrek yetmezliği idi. Altmış dokuz olguya perkutan trakeostomi ve 21 olguya cerrahi trakeostomi olmak üzere 90 olguya trakeostomi açıldı. Toplam izlenen hastaların %42,6'sı (n=112) kaybedildi.

Sonuç: Kronik yoğun bakımda izlenen olgular çok farklı sorunlarla karşılaşılabilir. Bu olgularda böbrek yetmezliği mortaliteyi ve morbiditeyi artıran en önemli risk faktörüdür. Ayrıca hastalarda APACHE 2 skorlaması

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Abstract

important risk fact increasing mortality and morbidity. Additionally, APACHE 2 scoring of patients may be helpful for the assessment and prediction of operative mortality and morbidity.

Keywords: Chronic intensive care, cardiac center, APACHE 2, prolonged mechanic ventilation

Öz

operatif mortalite ve morbiditeyi değerlendirmede ve öngörmede yardımcı olabilir.

Anahtar kelimeler: Uzayan yoğun bakım hastaları, kalp merkezi, APACHE 2, uzamış mekanik ventilasyon

Introduction

Currently, with the development of technology in cardiac centers, both invasive cardiac procedures and open heart surgery operations are successfully performed for geriatric cases with higher risks. This situation has led to longer intensive care and hospital stays. Studies have stated that nearly 19-45% of cases have lengthened intensive care duration after open-heart surgery (1,2). For lengthened intensive care duration, a variety of risk factors may be listed such as advanced age, chronic obstructive pulmonary disease (COPD), renal failure or dysfunction, atrial fibrillation, low ejection fraction, emergency surgery, previous history of cardiac surgery and inotrope support (3).

As the intensive care duration lengthens for cases, additional problems that may increase mortality and morbidity may develop and support treatments are required to resolve these problems. The most important of these are tracheostomy performed in cases requiring a longer duration of mechanical ventilation support to reduce complications of endotracheal intubation and mechanical ventilation to a minimum and ensure patient comfort, and renal replacement treatments to control kidney failure.

There are many factors affecting mortality in intensive care units (ICU). By noting these factors, a variety of scoring systems were developed to determine the patient's prognosis. The Acute Physiology and Chronic Health Evaluation (APACHE) is one of the most commonly used systems with this aim. The most important advantages of these scoring systems are the creation of common use, reliable database, lowering costs in intensive care, effective use of resources, assisting in clinical decisions and applications and the opportunity for objective assessment. However, some studies have proposed that these scoring systems are insufficient to estimate the prognosis for patients admitted to intensive care for long durations (4).

Prolonged mechanical ventilation (PMV) is a common problem, with a reported incidence between 2.9% and 8.6% (5) after coronary artery bypass grafting (CABG). The PMV patients were older, sicker, had more complex operations and had higher rates of postoperative morbidity.

The primary aim of our study is to investigate the clinical and demographic characteristics of patients admitted to a chronic intensive care center and report our five-year experience. Our secondary aim to investigate the correlation of patient APACHE 2 and Glasgow Coma scale (GCS) scores with mortality and our final aim is to evaluate the additional support treatments.

Material and Methods

This study was retrospectively performed on cases admitted to the chronic ICU due to lengthened intensive care durations in the cardiovascular surgery intensive care or coronary ICU from 1 September 2014 to 1 September 2019. After receiving Ethics Committee permission from the Ethics Committee of İstanbul Provincial Directorate of Health, Mehmet Akif Ersoy Chest and Cardiovascular Diseases Hospital (decision no: 59, date: 10/9/2019), the patient information for patients admitted to chronic intensive care were investigated from admission files and the hospital electronic records system.

Study forms containing information about the age, gender, main diagnosis, intensive care stay duration, problems developing in intensive care, discharge status, etc. of patients were created. Patients with missing information or who stayed in chronic intensive care for less than twenty-four hours were not included in the study.

Additionally, the APACHE 2 and GCS used during the monitoring and treatment of every patient in intensive care were evaluated.

COPD was defined as those patients with a COPD diagnosis or patients who required bronchodilator treatment before surgery. All patients, except for the emergency cases, were examined by the pulmonologist before the operation as a routine workup.

Chronic renal dysfunction (CRD) denoted the patients who had serum creatinine levels above the normal (0.5-1.3 mg/dL).

The primary clinical endpoint of this study was to evaluate the weaning failure by 7 days.

Was to evaluate the weaning failure by 7 days after surgery. The pulmonary complication was defined as any pulmonary abnormality occurring in the postoperative period that produces identifiable disease or dysfunction that is clinically significant and that adversely affects clinical course such as Postoperative Respiratory Distress syndrome, reintubation, presence of pneumothorax or pulmonary effusion but not, PMV (6).

The neurologic status of the patients was examined daily: the daily neurologic status of the patients were performed neurologic complication was defined as the presence of any cerebrovascular event or transient neurologic dysfunction.

Infectious complications were defined as positive blood, urine, sputum or wound cultures postoperatively, requiring dressings and intravenous antibiotics, requiring revision surgery (like mediastinal infection) or presence of radiographic infiltrates.

The gastrointestinal complication was defined as the presence of 1 or more of the following (7). Hematemesis or melena (with a 42 g decrease in hemoglobin level).

Statistical Analysis

SPSS 22 was used for analyzing data. The distribution of variables was measured with the Kolmogorov-Smirnov test. Descriptive statistics used mean, standard deviation, median, minimum, maximum, frequency and percentage values. Quantitative independent data analysis used the Mann-Whitney U test. Qualitative data analysis used the chi-square test. The effect level was researched with univariate and multivariate logistic regression. P<0.05 was accepted as significant.

Results

Two hundred sixty three patients (61% male, 39% female) were enrolled in the study. The mean age of patients was 64.6±6 years. Of patients, 61% were male and 39% were female. In terms of age, 134 (51%) were under 65 years and 129 (49%) were over 65 years of age. The mean duration of stay in intensive care was 34.6±68 days. Of cases, 46% had coronary bypass surgery (n=122), 25% had valve + aorta dissection (n=67), 19% had acute coronary artery (n=51) and 7% had peripheral artery disease (n=17).

The demographic characteristics of the cases are summarized in Table 1.

The mortality rate of entire monitored patients during this study period was 42.6% When the reasons for mortality of cases are investigated, the most frequently observe comorbidity was kidney failure at 41% (n=48). Patients with high APACHE scores and low GCS scores were found and have significantly higher mortality rates.

The mortality status of cases and Influencing factors are summarized in Table 2.

The univariate model observed significant effects of APACHE 2 score, APACHE 2 mortality % rates, GCS score and renal failure for prediction of mortality (p<0.05). When the efficacy of these variables was tested in the multivariate model, APACHE 2 expected mortality rate % and kidney failure were independently significant for prediction of mortality (Table 3). The reasons for which patients were followed up in the ICU (Table 4).

Discussion

There is limited data related to a long duration of admission to intensive care for patients in Turkey. Agencel et al. (8) reported 9.3% of patients admitted to a tertiary ICU stayed for 21 days or longer. Martini et al. (9) stated that surgical critical care patients stayed for a mean of 116 days. However, the ICU duration of stay for patients with respiratory diseases was identified as 24.17±8.38 days (10). In our study, the surviving group of patients was admitted for 27.5±33.4 days, while the patients in the mortality group were monitored in intensive care for mean 44.2±96.38 days (Table 1).

As in the whole world, the elderly population is increasing in Turkey. Recent census counts in our country identified the elderly population rate as 8.3% (11). The elderly population has 4 times higher surgical requirements compared to the remaining population. In the elderly patient group, standard mortality rates for those undergoing operations were identified to be 87% high compared to unoperated peers compared to data in the national mortality information bank (12). Ursavas et al. (10) in a study of a respiratory ICU did not identify a significant difference between the mean ages of surviving and mortal patients. Similarly, in our study, the mortality rates for patients aged over 65 years, comprising 49% of the group admitted to intensive care, were not different compared to those under 65 years of age (Table 2).

According to gender, 60.1% of our patients were male and 39.9% were female. Differences linked to gender have been discussed in previous studies; however, it is uncertain whether gender is a predictive factor for clinical outcomes or not. Research in Sweden revealed 60% of patients in ICU were male; however, disease severity was similar to females (13). Our study shows similarities to this study. In our study, gender was not a factor providing clues about the long duration of stay. It is not considered that gender is associated with high mortality rates (Table 2).

Mortality after cardiac surgery is still a controversial topic in spite of surgical techniques developed and anesthesia management. A variety of studies found mortality after cardiac surgery was from 2.94 to 30.7% (14,15). In our study, mortality was 42.6%. The reason for this may be linked to the inclusion of those admitted to chronic intensive care after cardiovascular surgery and patients with stay lengthened due to hypoxia or who could not be weaned from mechanical ventilation. Diagnoses for patients admitted to intensive care are various, with some patients having more than one diagnosis. The most common cause in the mortality group was cardiopulmonary arrest occurring due to any factor. In our retrospective study, the patient data not being recorded in detail on admission or cardiopulmonary arrests without explained cause may have led to this general diagnosis being most frequent in the mortality group.

Doerr et al. (16) in a 2801 patient study of APACHE 2 reported it showed good performance in terms of calibration and differentiation statistics. Argyriou et al. (17) reported the APACHE 2 score had a good prediction of outcomes in the cardiac ICU and had comparable differentiative capabilities. Kamış et al. (18) identified the APACHE 2 score for the surviving group in the ICU was 20.5±7.28, while it was 24.9±6.22 in the mortality group. They reported the

Table 1. Demographic data

		Minimum-maximum		Median	Av.± SD/n-%	
		23.0	86.0	65.0	64.4	12.6
Age	≤65	-	-	-	134	51.0%
	>65	-	-	-	129	49.0%
Gender	Female	-	-	-	105	39.9%
	Male	-	-	-	158	60.1%
Follow-up duration (day)		1.0	685.0	16.0	34.6	68.4
APACHE 2		7.0	50.0	22.0	22.4	7.9
APACHE mortality (%)		8.0	97.0	42.4	44.1	22.8
GCS		0.0	15.0	11.0	10.5	3.9
Valve + Aorta dissection	(-)	-	-	-	196	74.5%
	(+)	-	-	-	67	25.5%
Bypass	(-)	-	-	-	141	53.6%
	(+)	-	-	-	122	46.4%
Periphary + carotid + abdominal aneurysm	(-)	-	-	-	246	93.5%
	(+)	-	-	-	17	6.5%
Coronary + emergency + COPD	(-)	-	-	-	212	80.6%
	(+)	-	-	-	51	19.4%
Kidney failure	(-)	-	-	-	126	47.9%
	(+)	-	-	-	107	40.7%
Percutaneous tracheostomy	(-)	-	-	-	194	73.8%
	(+)	-	-	-	69	26.2%
Surgical tracheostomy	(-)	-	-	-	240	91.3%
	(+)	-	-	-	23	8.7%
Mortality	(-)	-	-	-	151	57.4%
	(+)	-	-	-	112	42.6%

GCS: Glasgow Coma scale, COPD: Chronic obstructive pulmonary disease, Av: Average, SD: Standard deviation, APACHE: Acute physiology and chronic health evaluation, n: Number

APACHE 2 score was significantly higher for patients in the mortality group. In our study, the mean APACHE 2 scores for patients who died were 24.9±8.0, while it was 20.5±7.2 for surviving patients. Our results are similar to the studies above.

There are a variety of situations limiting the use of another prognostic parameter (19) of the Glasgow Coma scale. Long mechanical ventilation duration and postoperative sedation may be given as examples (20). The values of postoperative scoring systems may be affected by electrolyte and blood glucose imbalance, long mechanical ventilation duration, sedation after open-heart surgery and especially the use of cardiopulmonary bypass (21). As a result, the GCS scoring may not be very effective. In our study, the GCS in the surviving group was 11.4±3.7, while it was 9.43±8 for the mortality group and this was statistically significant ($p<0.05$).

In the postoperative period (22), the use of intra-aortic balloon pumps and ventricular support devices, and Low Cardiac Output syndrome are significant parameters affecting patient outcomes. Unfortunately, most scoring systems ignore these parameters (23). As a result, mortality rates measured with cardiac postoperative scoring systems may be roughly compatible but insufficient. It may be more appropriate to add a cardiac scoring system to the APACHE 2 and GCS scores.

Mortality due to cardiac reasons in CRF patients is reported from 40-50%. This rate is nearly 20 times the risk for people without renal failure (24). Open heart surgery mortality for chronic renal failure (CRF) patients is higher compared to patients with normal kidney functions (25,26). In our study, the renal failure rate was significantly higher in the mortality group compared to the surviving group ($p<0.05$) (Table 2).

Table 2. Analysis

		Mortality (-)			Mortality (+)			
		Av.± SD/n-%		Median	Av.± SD/n-%		Median	p
		64.6±12.1		67.0	64.2	13.2	64.0	0.963[m]
Age	≤65	74	49.0%	-	60	53.6%	-	0.464[χ^2]
	>65	77	51.0%	-	52	46.4%	-	
Gender	Female	65	43.0%	-	40	35.7%	-	0.230[χ^2]
	Male	86	57.0%	-	72	64.3%	-	
Follow-up duration (days)		27.5	33.4	15.0	44.2	96.8	17.5	0.132[m]
APACHE2		20.5	7.2	21.0	24.9	8.0	25.0	**0.000[m]**
APACHE mortality (%)		35.6	19.0	34.0	55.3	22.6	57.0	**0.000[m]**
GCS		11.4	3.7	13.0	9.4	3.8	10.0	**0.000[m]**
Valve + Aorta dissection	(-)	110	72.8%	-	86	76.8%	-	0.469[χ^2]
	(+)	41	27.2%	-	26	23.2%	-	
Bypass	(-)	82	54.3%	-	59	52.7%	-	0.794[χ^2]
	(+)	69	45.7%	-	53	47.3%	-	
Peripheral + carotid + abdominal aneurysm	(-)	144	95.4%	-	102	91.1%	-	0.162[χ^2]
	(+)	7	4.6%	-	10	8.9%	-	
Coronary + emergency + COPD	(-)	118	78.1%	-	94	83.9%	-	0.241[χ^2]
	(+)	33	21.9%	-	18	16.1%	-	
Kidney failure	(-)	91	60.3%	-	35	31.3%	-	**0.000**[χ^2]
	(+)	41	27.2%	-	66	58.9%	-	
Percutaneous tracheostomy	(-)	103	68.2%	-	91	81.3%	-	**0.017[χ^2]**
	(+)	48	31.8%	-	21	18.8%	-	
Surgical tracheostomy	(-)	144	95.4%	-	96	85.7%	-	**0.006[χ^2]**
	(+)	7	4.6%	-	16	14.3%	-	

GCS: Glasgow Coma scale, COPD: Chronic Obstructive Oulmonary disease, Av: Average, SD: Standard deviation, APACHE: Acute physiology and chronic health evaluation, n: Number, [m]Mann-Whitney U test/χ^2: chi-square test

Table 3. Regression data

	Unvariate model					Multivariate model				
	OR	95% CI			p	OR	95% CI			p
APACHE 2	1.08	1.04	-	1.12	**0.000**	-	-	-	-	-
APACHE mortalite (%)	1.04	1.03	-	1.06	**0.000**	1.04	1.02	-	1.05	**0.000**
GCS	0.88	0.82	-	0.94	**0.000**	-	-	-	-	-
Kidney failure	4.19	2.41	-	7.26	**0.000**	3.25	1.70	-	6.21	**0.000**
Percutaneous tracheostomy	0.50	0.28	-	0.89	**0.019**	0.35	0.17	-	0.73	**0.005**
Surgical tracheostomy	3.43	1.36	-	8.65	**0.009**	2.97	1.02	-	8.68	**0.046**

OR: Odds ratio, CI: Confidence interval, GCS: Glasgow Coma scale, APACHE: Acute physiology and chronic health evaluation

Table 4. Indicators of intensive care

	Number of the patients	Percentage
Chronic renal failure	62	23.50%
Chronic obstructive pulmonary disease	32	12.16%
Hypoxic brain injury	18	6.84%
Sepsis	42	15.96%
Mediastinitis	18	6.84%
Advanced right heart failure	25	9.50%
Stroke + subarachnoid hemorrhage	17	6.46%
Left heart failure + hemodynamic instability	15	5.70%
Gastrointestinal complication	4	1.52%
Acute Respiratory Distress syndrome	22	8.36%
Peripheral arterial disease	8	3.04%

Tracheostomy is a surgical method frequently applied to patients with long term mechanical ventilation, for treatment of upper respiratory tract obstruction, and those with endotracheal intubation in ICU and predicted to remain linked to a mechanical ventilator for a long period (27,28). Percutaneous tracheostomy (PT) is easily performed, has low complication rates and can be performed in a short period at the patient's bedside so it is mostly chosen in recent years and is frequently used in the ICU for cases with elective tracheostomy especially (29,30). During the PT procedure, complications like hemorrhage, hypoxia, hypercapnia, pneumothorax, pneumomediastinum, subdermal emphysema, paratracheal insertion, tracheal wall injury, aspiration, sudden death, and esophagus injury may be observed (29). In our study, 21 (23%) surgical tracheostomy and 69 (77%) PT was performed in 263 patients hospitalized in the ICU in the last 5 years.

In studies, rates for minor hemorrhage linked to the PT procedure are 1.51-5.2% (28,31,32), while rates for major hemorrhage are 0.75-2.6% (28). In our study, after the PT procedure, 10 (14.4%) had minor hemorrhage and two (1.9%) had a moderate hemorrhage. For the surgical procedure, 10 (76.8%) had minor hemorrhage and five (23.8%) had a moderate hemorrhage. Major hemorrhage was not observed. The reason for the high incidence of minor hemorrhage is considered to be the use of anticoagulant medication by our patients. Only one case developed pneumothorax linked to percutaneous tracheostomy.

Coronary artery bypass surgery comprises a significant portion of everyday cardiac surgery practice; about 90% for many cardiac surgery centers. PMV is still a significant reason for postoperative morbidity and mortality. Apart from the patient-related suffering, these patients cause a significant increase in the workload of postoperative ICU. Postoperative prolonged ventilation was associated with advanced, CRD, and longer perfusion times in CABG patients (33).

Study Limitations

There are some limitations to this study. The first is that our study took place in a single-center, so it may not reflect all chronic intensive care patients in Turkey. The second is that it was a retrospective study. There is a need for multicenter studies to further confirm our findings.

Conclusion

Very different problems may be encountered in cases observed in the chronic ICU. For these cases, kidney failure is the most important risk fact increasing mortality and morbidity. Additionally, APACHE 2 scoring of patients may be helpful for the assessment and prediction of operative mortality and morbidity.

Ethics

Ethics Committee Approval: Ethics Committee permission from the Ethics Committee of İstanbul Provincial Directorate of Health, Mehmet Akif Ersoy Chest and Cardiovascular Diseases Hospital (decision no: 59, date: 10/9/2019).

Informed Consent: Because the study is retrospective study, patient consent was not obtained.

Authorship Contributions

Concept: B.B., H.D.Ö., Design: B.B., H.D.Ö., Data Collection or Processing: B.B., Analysis or Interpretation: H.D.Ö., Literature Search: B.B., H.D.Ö., Writing: B.B.

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CASE REPORT

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An Unusual Combination of Acute Pancreatitis Etiologies: Hypertriglyceridemia and Carbamazepine Use

Akut Pankreatit Etiyolojilerinin Sıra Dışı Bir Kombinasyonu: Hipertrigliseridemi ve Karbamazepin Kullanımı

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Abstract

Among several etiologic factors of acute pancreatitis (AP), hypertriglyceridemia and chronic drug use are less frequent causes, responsible for approximately 10% of all cases. Our aim is to present a case of AP who had hypertriglyceridemia and was receiving carbamazepine.

Keywords: Akut pancreatitis, hypertriglyceridemia, carbamazepine use

Öz

Birçok farklı etiyolojik faktörün neden olduğu akut pankreatit (AP) olgularının %10'dan, hipertrigliseridemi ve kronik ilaç kullanımı sorumludur. Amacımız hipertrigliseritemisi olan ve karbamazepin kullanan hastada gelişen AP olgusunu sunmaktır.

Anahtar kelimeler: Akut pankreatit, hipertrigliseridemi, karbamazepin kullanımı

Introduction

Acute pancreatitis (AP) is one of the most common gastrointestinal disorder that needs hospitalization with a mortality rate of 30% in mild to severe forms (1). Typical abdominal pain, elevated pancreatic enzymes (amylase and lipase) and characteristic tomographic findings are the mainstay in the diagnosis. The most common causes of AP are cholelitiasis and alcohol consumption. However, hypertriglyceridemia, drug use and anti-microbial agents are also involved in the etiology of AP. Serum levels of triglyceride in hypertriglyceridemia related AP usually exceed 500 mg/dL or even 1000 mg/dL (2). The pathogenesis of hypertriglyceridemia related AP is lipotoxicity which is caused by breakdown of triglycerides to free fatty acids by pancreatic lipase (3). Additionally, more than hundreds of drugs including antihypertensives, antibiotics, anti-inflammatory drugs and antiepileptics are accused for AP (1). We present a case of AP who had hypertriglyceridemia and was receiving carbamazepin for epilepsy.

Case Report

A 58 year women who had no chronic disorder, except epilepsy, admitted to emergency department with abdominal pain and nause-vomitting lasting for 5 hours. She has been using carbamazepin for 10 years, and also had a history of AP episode 5 years ago. Except right upper quadrant abdominal pain, she had no complaint. First blood sample of the patient was lipemic which precludes analysis of biochemical variables (Figure 1). At this sample, lipase: 878 U/L amilase: 485 U/L, triglyceride: 1420 mg/dL and C-reactive protein: 29 mg/L. The other

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biochemical variables and hemogram parameters were all in normal range. No sign of cholelithiasis or dilatation on choledoch was observed. Tomographic examination revealed interstitial pancreatitis and fluid collection around inflammation area, but no pancreatic necrosis or hemorrhage (Figure 2). The patient was diagnosed as drug and hypertriglyceridemia related AP. Antiepileptic medication was switched to levetirasetam which is less likely to cause pancreatic inflammation. Until abdominal pain of the patients recovered, oral nutrition was ceased and intravenous hydration was administered. After an uneventfull hospitalization for 5 days, clinical and biochemical improvements were achieved, and the patient was discharged by recommending out patient clinical follow-up.

Figure 1. Chylous appearance of serum sample indicating hypertrygliceridemia

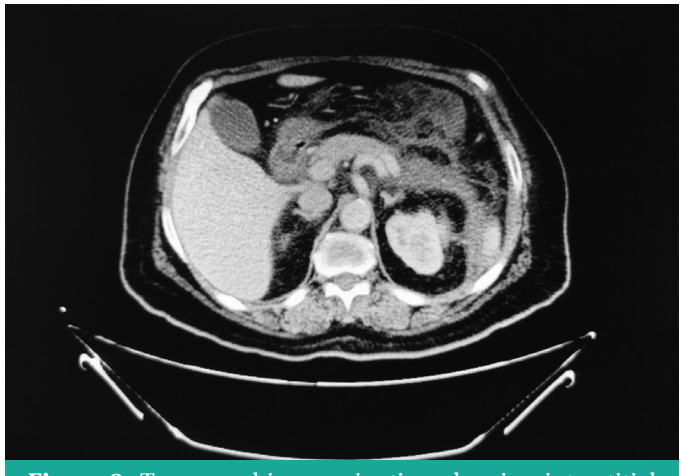

Figure 2. Tomographic examination showing interstitiel pancreatitis and fluid collection around inflammation

Discussion

Acute inflammation of pancreatitis is associated with over 270,000 hospitalizations and costs up to 2.6 billion dollars per year (4). The outcome of AP may range from self-resolving disorder to multiorgan failure, or even death. Hypertriglyceridemia related AP is at the third rank, following gallstones and alcohol, with a frequency of 1-7% of patients with AP (2). Bessembinders et al. (5) showed that AP risk of patients with triglyceride >1000 mg/dL is 8%. They also demonstrated that the risk logaritmically rises if there is comorbidity like diabetes, obesity, alcohol intake or chronic drug use. Although the clinical presentation of hypertriglyceridemia related AP is similar to other causes related AP, the risk of complications is higher (6). Clinicians should be aware of the fact that high triglyceride levels (>500 mg/dL) may supress the release of pancreatic enzymes and may cause confusion in the diagnosis of AP (7). Nevertheless, authors recommend similar therapeutic approach to patients with hypertriglyceridemia induced AP, including cessation of oral intake, fluid repletion, opoid analgesia and rapidly decreasing serum triglyceride levels. In the past few decades, some authors have suggested plasmapheresis or combination of insulin and heparin in the management of hypertriglyceridemia induced AP (8). And also minimizing other risk factors of AP is essential like discontinuation of drugs which may trigger recurrence of AP.

On the otherhand, because it is difficult to establish a cause and effect relationship between drug and pancreatitis, controversies exist in the diagnosis and the treatment of drug induced AP. Therefore, case reports rather than randomized clinical trials dominate the literature. Majority of reports support the belief that cessation of suspected drug plays crucial role, and the patients experience rapid symptom relief. The Naranjo Algorithm (Table 1) is used to determine the probability of a change in the clinical status of a patient that is related to drug use rather than other factors (9). Our patient had a final score of 6 meaning that an adverse drug reaction which caused AP is probable. Thus, carbamazepine was switched to a newer and relatively safer antiepyleptic drug “Levetiracetam” (10). In our patient, symtomps declined after levetiracetam therapy initiated. Drug or hypertriglyceridemia related AP is less frequently observed which may cause delay in the diagnosis of the disorder. The diagnosis of AP is established after excluding other etiologic factors. Carbamazepine induced pancreatitis is related to clinical situation and additional risk factors of AP, but not the dose or the duration of the medication.

Table 1. Naranjo algorithm (probability scoring of acute pancreatitis)

Interpretation of the total score:		
9 or more, ADR highly probable,		
5 to 8 ADR is probable,		
1 to 4, ADR is possible,		
0 or less, ADR is doubtful		
1. Are there previous conclusive reports on this reaction?	+1	0
2. Did the adverse event appear after the suspected drug was administered?	+2	-1
3. Did the adverse reaction improve when the drug was discontinued or a specific antagonist was administered?	+1	0
4. Did the adverse reaction reappear when the drug was re-administered?	+2	-1
5. Are there alternative causes (other than the drug) that could on their own have caused the reaction?	-1	+2
6. Did the reaction re-appear when a placebo was given?	-1	+1
7. Was the drug detected in the blood (or other fluids) in a concentration to be toxic?	+1	0
8. Was the reaction more severe when the dose was increased, or less severe when the dose was decreased?	+1	0
9. Did the patient have a similar reaction on the same or similar drugs in any previous exposure?	+1	0
10. Was the adverse event confirmed by any objective evidence?	+1	0

ADR: Adverse drug reaction

Hypertriglyceridemia as seen in this case, may enhance the risk of AP for the patients who have been receiving carbamazepin. Although some cases require individualization in the management of the disorder, general approach to AP with different etiologies is similar. Patients with high risk of AP should be identified, and the risk factors like high triglyceride should be appropriately treated or drugs associated with high incidence of AP should be discontinued. In conclusion, clinicians should consider initiating antiepileptic or other drug groups with low risk for pancreatitis to patients who had a history or additional risk factor for AP.

Ethics

Informed Consent: Written consent was received from the patient.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Concept: S.H., M.İ.O., Design: S.H., P.G., Ö.S., C.H., Data Collection or Processing: S.H., C.H., A.E.A., Analysis or Interpretation: A.E.A., Ö.S., P.G., Literature Search: S.H., C.H., A.E.A., Writing: S.H., P.G., Ö.S., C.H.

Conflict of Interest: Authors declare that there is no conflict of interest with regard to this manuscript.

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