

March 2021  
Volume: 25 Issue: 1

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

ISSN 1301-2193



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

March / Mart 2021 Vol / Cilt: 25 No / Sayı: 1

**COPYRIGHT HOLDER / YAYIN SAHİBİNİN ADI**

**Society of Endocrinology and Metabolism of Turkey** / Türkiye Endokrinoloji ve Metabolizma Derneği adına  
L. Füsün Saygılı, MD

**MANAGING CLERICAL DIRECTOR / SORUMLU YAZI İŞLERİ MÜDÜRÜ**

Nilgün Başkal, MD

**ADRESS FOR MANAGEMENT / YAYIN İDARE MERKEZİ**

The Society of Endocrinology and Metabolism of Turkey  
Meşrutiyet Caddesi No: 29/12 Kızılay, Ankara, TURKEY  
Phone / Tel: +90 312 425 20 72  
Fax / Faks: +90 312 425 20 98  
web: www.turkjem.org  
E-mail / E-posta: president@temd.org.tr

**PUBLICATION TYPE AND PERIODS / YAYININ TÜRÜ VE PERİYODU**

**Turkish Journal of Endocrinology and Metabolism is published 4 (March, June, September and December) times a year.  
Local perid publication.**

Turkish Journal of Endocrinology and Metabolism 3 ayda bir olmak üzere yılda 4 sayı (Mart, Haziran, Eylül ve Aralık) yayınlanır.  
Yaygın/Süreli.

**The Turkish Journal of Endocrinology and Metabolism is indexed in Emerging Sources of Citation Index (ESCI),  
British Library, CINAHL, Directory of Open Access Journals (DOAJ), EBSCO, EMBASE, Index Copernicus, SCOPUS,  
ProQuest, TÜBİTAK / ULAKBİM TR Index, TürkMedline, Türkiye Citation Index.**

**For requests concerning subscription information and advertising, please contact the Publisher:**



Türkiye Klinikleri

**Publishing House-Publisher / Basıldığı Yer-Basımçı-Yayımcı**

Ortadoğu Reklam Tanıtım Yayıncılık Turizm Eğitim İnşaat Sanayi ve Ticaret A.Ş. (Türkiye Klinikleri)

**Address:** Nasuh Akar Mah. Türkocağı Cad. No:30 Balgat - Ankara Turkey

Phone / Tel: +90 312 286 56 56

Fax / Faks: +90 312 220 04 70

E-mail / E-posta: info@turkiyeklinikleri.com

Web page: [www.turkiyeklinikleri.com](http://www.turkiyeklinikleri.com)

**The services of "Article Tracking (Automation)", "Layout", "Web Site Design-Operation" and "e-Mailing" are provided  
by Türkiye Klinikleri.**

Bu derginin "Makale Takip (Otomasyon)", "Mizanpaj", "Web Sitesi Tasarım-İletişim" ve "Toplu e-Posta" hizmetleri Türkiye Klinikleri tarafından sağlanmaktadır.

**Publication Date:** 09.03.2021

ISSN: 1301-2193

E-ISSN: 1308-9846



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

## Owner on Behalf of the Society of Endocrinology and Metabolism of Turkey

L. Füsün Saygılı, Ege University Faculty of Medicine, İzmir, Türkiye

## Editor-In-Chief

Nilgün Başkal, Ankara University Faculty of Medicine Retired Lecturer,  
Ankara, Turkey

## Deputy Editor

Murat Faik Erdoğan, Ankara University Faculty of Medicine, Ankara, Turkey

## Associate Editors

Hasan Ali Altunbaş, Antalya, Turkey

Dilek Gogas Yavuz, Marmara University Faculty of Medicine, İstanbul, Turkey

Neslihan Başçıl Tütüncü, Başkent University Faculty of Medicine, Ankara, Turkey

## Statistical Consultant

Atilla Halil Elhan, Ankara, Turkey

Levent Dönmez, Antalya, Turkey

Derya Öztuna, Ankara, Turkey

Can Ateş, Van, Turkey

## Language Editor

Jennifer Gabriel, California, USA

## Honorary Board

Sema Akalin, Marmara University Faculty of Medicine Retired Lecturer, İstanbul, Turkey

Metin Arslan, Gazi University Faculty of Medicine Retired Lecturer, Ankara, Turkey

Gülbüz Erdoğan, Ufuk University Faculty of Medicine, Ankara, Turkey

Olca Gedik, Hacettepe University Faculty of Medicine Retired Lecturer, Ankara, Turkey

Sadi Güngöçlü, İstanbul University Cerrahpaşa Faculty of Medicine Retired Lecturer, İstanbul, Turkey

Hüsrev Hatemi, İstanbul, Turkey

Şazi İmamoğlu, Uludağ University Faculty of Medicine Retired Lecturer, Bursa, Turkey

Senay Molvalılar, İstanbul, Turkey

Candeğer Yılmaz, Ege University Faculty of Medicine Retired Lecturer, İzmir, Turkey

## Editorial Board

Ersin Akarsu, Gaziantep University Faculty of Medicine, Gaziantep, Turkey

Müjde Aktürk, Gazi University Faculty of Medicine, Ankara, Turkey

Faruk Alagöl, Koç University Faculty of Medicine, İstanbul, Turkey

Maria Alevizaki, Athens University School of Medicine, Athens, Greece

İnan Anaforoğlu, Medical Park International Trabzon Hospital, Trabzon, Turkey

Yalçın Aral, Bozok University Institute of Health Sciences, Yozgat, Turkey

Ayşegül Atmaca, Ondokuz Mayıs University Faculty of Medicine, Samsun, Turkey

Göksun Ayvaz, Liv Hospital, Ankara, Turkey

Ömer Azal, Gulhane Education and Research Hospital, Ankara, Turkey

Mustafa Kemal Balcı, Akdeniz University Faculty of Medicine, Antalya, Turkey

J Paul Banga, University of Duisburg-Essen Faculty of Medicine, Germany

David Baylink, Loma Linda University, California, USA

Fahri Bayram, Erciyes University Faculty of Medicine, Kayseri, Turkey

Jens Bollerslev, Oslo University Hospital, Norway

Erol Bolu, Memorial Atasehir Hospital, İstanbul, Turkey

Steen Joop Bonnema, Odense University Hospital, Denmark

Bekir Çakır, Yıldırım Beyazıt University Faculty of Medicine, Ankara, Turkey

Mehtap Çakır, Kent Hospital, İzmir, Turkey

Berrin Çetinarslan, Kocaeli University Faculty of Medicine, Kocaeli, Turkey

Ahmet Çorakçı, Ufuk University Faculty of Medicine, Ankara, Turkey

Abdurrahman Çömlekcı, Dokuz Eylül University Faculty of Medicine, İzmir, Turkey

Selçuk Dağdelen, Hacettepe University Faculty of Medicine, Ankara, Turkey

Hatice Sebila Dökmetaş, İstanbul Medipol University Faculty of Medicine, İstanbul, Turkey

Leonidas H Duntas, Evgenideion Hospital, University of Athens, Greece

Belgin Efe, Eskişehir Osmangazi University Faculty of Medicine, Eskişehir, Turkey

Sevinç Eraslan, Dokuz Eylül University Faculty of Medicine, İzmir, Turkey

Tomris Erbaş, Hacettepe University Faculty of Medicine, Ankara, Turkey

Mehmet Erdoğan, Ege University Faculty of Medicine İzmir, Turkey

Eda Ertörer, Başkent University Adana Dr. Turgut Noyan Hospital, Adana, Turkey

John W. Funder, Monash University, Victoria, Australia

Hossein Gharib, Mayo Clinic, Minnesota, USA

Sait Gönen, İstanbul University Cerrahpaşa Faculty of Medicine, İstanbul, Turkey

Nilgün Güvener, Okan University Faculty of Medicine, İstanbul, Turkey

Serdar Güler, Liv Hospital, Ankara, Turkey

Sevim Güllü, Ankara University Faculty of Medicine, Ankara, Turkey

Zeliha Hekimsoy, Celal Bayar University Faculty of Medicine, Manisa, Turkey

Larry Jameson, Perelman School of Medicine Univ. Of Pennsylvania, Philadelphia, USA

Pinar Kadioğlu, İstanbul University Cerrahpaşa Faculty of Medicine, İstanbul, Turkey

Ahmet Kaya, Selçuk University Meram Faculty of Medicine, Konya, Turkey

Fahrettin Keleştimur, Health Institutes of Turkey, Ankara, Turkey

Mustafa Kutlu, Gulhane Education and Research Hospital, Ankara, Turkey

Pierre J. Lefebvre, University of Liege Faculty of Medicine, Liege, Belgium

Connie Newman, NYU School of Medicine, New York, USA

Tae Sun Park, Chonbuk National University Medical School, Jeonju, Korea

Andreas F. H. Pfeiffer, Charité Universitaetsmedizin Berlin, Germany

Gilles Russ, Pr Leenhardt La Pitie Salpetriere Hospital, France

İhan Satman, İstanbul University İstanbul Faculty of Medicine, İstanbul, Turkey

Füsün Saygılı, Ege University Faculty of Medicine, İzmir, Turkey

Alper Sönmez, Gulhane Education and Research Hospital, Ankara, Turkey

Tümay Sözen, Hacettepe University Faculty of Medicine, Ankara, Turkey

İbrahim Şahin, İnönü University Faculty of Medicine, Malatya, Turkey

Mustafa Şahin, Ankara University Faculty of Medicine, Ankara, Turkey

Refik Tanakol, İstanbul University İstanbul Faculty of Medicine, İstanbul, Turkey

Ali Rıza Uysal, Ankara University Faculty of Medicine, Ankara, Turkey

Kürşad Ünlühızarcı, Erciyes University Faculty of Medicine, Kayseri, Turkey

Ayşe Kubat Üzüm, İstanbul University İstanbul Faculty of Medicine, İstanbul, Turkey

Irfan Vardarli, Ruhr-University, Bochum, Germany

Anthony Weetman, The University of Sheffield, Sheffield, UK

Sema Yarman, İstanbul University İstanbul Faculty of Medicine, İstanbul, Turkey

Bülent Okan Yıldız, Hacettepe University Faculty of Medicine, Ankara, Turkey



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

## AIMS AND SCOPE

**Turkish Journal of Endocrinology and Metabolism (Turk J Endocrinol Metab)** is the peer-reviewed periodical on clinical and experimental endocrinology and metabolism diseases and related fields. It is the official journal of the Society of Endocrinology and Metabolism of Turkey and is published quarterly (March, June, September and December) as hardcopy and an electronic journal at [www.turkjem.org](http://www.turkjem.org). The manuscripts are published in English.

The journal publishes original research papers, reviews and case reports which primarily focus on clinical endocrinology. The journal's aim is to be essential for both endocrinologists and clinical practitioners.

### Open Access Policy

Turkish Journal of Endocrinology and Metabolism is an open access journal under the [Creative Commons 4.0 International Licence \(CC BY-NC-SA 4.0\)](https://creativecommons.org/licenses/by-nc-sa/4.0/). This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. The journal does not demand submission and article processing charge (APC) from authors.

Open Access Policy is based on rules of Budapest Open Access Initiative (BOAI) [\[Link\]](#)

Instructions for online manuscript submission, current issues and archives of the journal can be found at [www.turkjem.org](http://www.turkjem.org). Please do not send manuscripts to the editorial office. For other related issues you may contact the editorial office.

### Subscription information

Turkish Journal of Endocrinology and Metabolism is distributed free of charge to all endocrinology academicians and instructors serving in our country. Access to full-text articles of all issues of the journal is free at the journal's website [www.turkjem.org](http://www.turkjem.org)

### Instructions for authors

Instructions for authors are published in the journal pages and can be accessed at the web site of the journal [www.turkjem.org](http://www.turkjem.org)

### Material Disclaimer

Statements or opinions expressed in the manuscripts published in Turkish Journal of Endocrinology and Metabolism reflect the views of the author(s) and are not the opinions of the editors, the editorial board and the publisher. The editors, editorial board and the publisher disclaim any responsibility or liability for such materials.

### Advertising Policy

**Turkish Journal of Endocrinology and Metabolism** receives advertising support for its print and electronic editions and maintains editorial integrity through policies that define the Editorial/Advertiser relationship:

- Print and electronic advertising does not influence editorial decisions, and advertising is not an endorsement by the Publisher, Editor, or the Editorial Board.
- **Turk J Endocrinol Metab** reserves the right to refuse any advertising for any reason preserving the conditions consistent with the journal's high standards of healthcare editorial.
- Editors have full and final authority for approving print and electronic advertisements and for enforcing the advertising policy.
- Print advertisements are interspersed throughout the journal but do not interrupt the flow articles. The journal website contains online banner advertising.
- To avoid implied endorsement by the Journal, the article, or the authors of the article; advertisements are not adjacent to articles addressing the product or its disease state.
- The Publisher reserves the right to print the word "Advertisement" on any advertisement where it may not be clear, so readers can distinguish readily between advertising and editorial. It is the responsibility of the advertiser and its agencies to adhere to appropriate legal requirements and regulations. For all advertising information, please contact [reklam@turkiyeklinikleri.com](mailto:reklam@turkiyeklinikleri.com)

**The journal is printed on acid-free paper.**

All rights are reserved. Rights to the use and reproduction, including in the electronic media, of all communications, papers, photographs and illustrations appearing in this journal belong to the Turkish Journal of Endocrinology and Metabolism. Reproduction without prior written permission of part or all of any material is forbidden. The journal complies with the Professional Principles of the Press.

The paper used to print this journal conforms to ISO 9706: 1994 standard (Requirements for Permanence). The National Library of medicine suggests that biomedical publications be printed on acid free paper (alkaline paper).

Reviewing the articles' conformity to the publishing standards of the Journal, typesetting, reviewing and editing and editing the manuscripts and abstracts in English and publishing process are realized by Türkiye Klinikleri.



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

## INSTRUCTIONS FOR AUTHORS

Turkish Journal of Endocrinology and Metabolism (Turk J Endocrinol Metab) issues papers on all aspects of endocrinology. The journal is the scientific publishing organ of the Society of Endocrinology and Metabolism of Turkey and has been published quarterly (March, June, September and December) since 1997. In addition to original articles, case reports, review articles, letters to the editor, educational articles, sections of question and answers, abstracts from literature and announcements of congresses/meetings are also published. Turkish Language Institution dictionary and orthography guide should be taken as basic for literary. The idioms used should be checked. The scientific and ethical liability of the manuscripts belongs to the authors and the copyright of the manuscripts belongs to the Turkish Journal of Endocrinology and Metabolism. The authors should submit the signed copyright transfer form together with their manuscripts. Authors are responsible for the contents of the manuscript and accuracy of the references. The authors should guarantee that their manuscripts has not been published and/or is not under consideration for publication in any other periodical. This requirement does not apply to papers presented in scientific meetings and whose summaries, not exceeding 250 words, are published. In this case, however, the name, date and place of the meeting in which the paper was presented should be stated. The signed statement of scientific contributions and responsibilities of all authors is required.

Turkish Journal of Endocrinology and Metabolism does not charge any article submission or processing charges.

### Peer-review

Editorial policies of the journal are conducted according to the rules advised by Council of Science Editors and reflected in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication (<http://www.icmje.org/>).

Submitted manuscripts are subjected for double-blind peer-review. The scientific board guiding the selection of the papers to be published in the Journal consists of elected experts of the Journal and if necessary, selected from national and international experts in the relevant field of research. All manuscripts are reviewed by the editor, section associate editors and at least three internal and external expert referees. All research articles undergo review by statistical editor as well.

Submitted manuscripts are also subjected for the evaluation of plagiarism, duplicate publication by automatic software. Authors are obliged to acknowledge if they published study results in full or in part in form of abstracts.

The authors of the accepted manuscripts should be in consent that the editor and associate editors could make corrections without changing the main text of the paper. Manuscript format should be in accordance with Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication (<http://www.icmje.org/>).

For details: <http://www.turkjem.org/pages/peer-review-ethic-5>

### General Guidelines

Manuscripts can only be submitted electronically through the web site (<http://www.turkjem.org>) after creating an account. This system allows online submission and peer-review. The manuscripts are archived according to ICMJE-[www.icmje.org](http://www.icmje.org), Index Medicus (Medline/PubMed) and Ulakbim-Turkish Medicine Index Rules. Rejected manuscripts, except artwork are not returned.

For the experimental, clinical and drug human studies, approval by ethical committee and statement on the adherence of the study protocol to the international agreements (Helsinki Declaration revised 2013 (<https://www.wma.net/wp-content/uploads/2016/11/DoH-Oct2013-JAMA.pdf>)) are required. In experimental animal studies, the authors should indicate that the procedures followed were in accordance with animal rights (Guide for the care and use of laboratory animals,

<https://www.nap.edu/read/12910/chapter/1>) and they should obtain animal ethic committee approval. The Ethic Committee approval document should be submitted to the Turkish Journal of Endocrinology and Metabolism together with the manuscript.

The approval of the ethic committee, statement on the adherence to international guidelines mentioned above and that the patients' informed consent is obtained should be indicated in the 'Material and Method' section and is required for case reports whenever data/media used could reveal identity of the patient. The declaration of the conflict of interest between authors, institutions, acknowledgement of any financial or material support, aid is mandatory for authors submitting manuscript and the statement should appear at the end of manuscript. Reviewers are required to report if any potential conflict of interest exists between reviewer and authors, institutions.

### Original Articles

Clinical research should comprise clinical observation, new techniques or laboratory studies. Provided that these manuscripts are written with lower-case letters, they should include the title in Turkish/English, the background and the key words in Turkish/English, introduction, materials and methods, results (findings), discussion, references, tables, charts, pictures and they should be written in accordance with Journal Agent rules. They should not exceed sixteen (A4) pages.

It is recommended to present research articles and meta-analysis/systematic reviews article according to the guidelines on specific design of the study: randomized studies (CONSORT), observational studies (STROBE), studies on diagnostic accuracy (STARD), meta-analysis and systematic review (PRISMA, MOOSE) and other study designs ([www.equator-network.org](http://www.equator-network.org)).

### Author Information

The name and the surname of the authors should be written without abbreviation. The academic titles, the affiliations and the addresses of these affiliations should be clearly declared. Furthermore, the contact information of the corresponding author should be entered to the system. Since e-mail will be used primarily for the contact with the authors, the e-mail of the corresponding author should be indicated. In addition the phone and the fax numbers should be also indicated.

### Title Page

This page should include the titles of the manuscript, key words and running titles. In Turkish manuscripts the title in English should also take place. Likely, Turkish title should be mentioned for articles in foreign language. If the content of the paper has been previously presented or its abstract has been published, an explanation should be made in this page about this issue. If there are any grants and other financial supports by any institutions or firms for the study, information must be provided by the authors.

### Abstract

Turkish and English summaries of the manuscript should take place in a manner that it will not exceed 250 words. The keywords should be written at the end of the summary. The references should not be cited in the summary section. As far as possible, use of abbreviations is to be avoided. If any abbreviations are used, they must be taken into consideration independently of the abbreviations used in the text. The summary should be written with four running titles.

**Purpose:** The goal of the study should be clearly stated.

**Material and Method:** The study should be defined, the standard criteria; it should be also indicated whether the study is randomized or not, whether it is retrospective or prospective, the statistical method, if any, should be indicated.

**Results (Findings):** The detailed result of the study should be given and the statistical significance level should be indicated.



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

## INSTRUCTIONS FOR AUTHORS

**Discussion:** It should reflect the results of the study, the favorable and unfavorable aspects should be declared.

**Key words:** At least three and maximum eight key words. (in English and in Turkish) Do not use abbreviations in the key words. Turkish key words will be provided by the editorial office for the authors who are not Turkish speakers. If you are not a native Turkish speaker, please re-enter your English keywords to the area provided for the Turkish keywords. English key words should be provided from Medical Subject Headings (<http://www.nlm.nih.gov/mesh/>) while Turkish key words should be provided from <http://www.bilimterimleri.com>.

Original researches should have the following sections;

### Introduction

Brief explanation about the topic should be done, the objective of the study should be indicated and these should be supported by the literature information.

### Materials and Methods

The study design should be described, it should be indicated whether it is interventional randomized or observational, whether it is retrospective or prospective, the number of trials, the characteristics, studied variables and specific methods, the used statistical methods should be indicated. If any, it should be indicated that the results should be scrutinized.

### Results (Findings)

The results should be given, the tables and the pictures should be given in numerical order and, the results should be indicated as % and/or p-values.

### Discussion

The obtained values should be discussed with its favorable and unfavorable aspects and, they should be compared with literature.

**Study Limitations:** Study Limitations and strengths, and directions for further research or implication must be discussed.

**Conclusion:** The conclusion of the study should be highlighted.

Authors contributions, Declaration of conflict of interest and Acknowledgements should appear at the end of the main text of manuscript.

### References

Accuracy of reference data is the author's responsibility. References should be numbered according to the consecutive citation in the text. References should be indicated by parenthesis in the text. If there is Turkish Reference, attention should be paid to indicate this. Journal titles should be abbreviated according to the style used in the Index Medicus. All the references, books, papers and similar articles should be cited as references should be written according to the rules of the International Committee of Medical Journal Editors Uniform Requirements for Manuscripts Submitted to Biomedical Journals ([http://www.nlm.nih.gov/bsd/uniform\\_requirements.html](http://www.nlm.nih.gov/bsd/uniform_requirements.html)).

**Journal:** The surnames of the authors and the initial of authors' names, the title of the paper, the title of the journal (the original abbreviation stated in the journal), year, volume and the page numbers.

**Example:** Collin JR, Rathbun JE. Involuntional entropion: a review with evaluation of a procedure. Arch Ophthalmol. 1978;96:1058-1064.

**Book with a Single Author:** The surname and the initial of the author, the title, chapter and section, the name of the editor, title of the book, place of publication, name of the printing house, year of print, page numbers.

**Example:** Herbert L. Conjunctivitis, keratitis and infections of periorbital structures. In: Armstrong D, Cohen J, eds. The Infectious Diseases (1st ed). Philadelphia; Mosby Harcourt; 1999;11;1-8.

**Book Chapter:** The surname and the initial of the author, chapter and section, name of the editor, title of the book, place of publication, name of the printing house, year of print, page numbers.

**Example:** O'Brien TP, Green WR. Periocular Infections. In: Feigin RD, Cherry JD, eds. Textbook of Pediatric Infectious Diseases (4th ed). Philadelphia; W.B. Saunders Company;1998:1273-1278.

**Visual Materials (Tables, Graphics, Figures, and Pictures):** All tables, graphics or figures should be enumerated according to the sequence within the text and a brief descriptive caption should be written. The abbreviations used should be definitely explained in the figure's legend. Especially, the text of tables should be easily understandable and should not repeat the data of the main text. Illustrations that already published are acceptable if supplied by permission of authors for publication. The details of the pictures should be distinguishable and they should be recorded in JPEG format and in 500 pixels per inch at least.

### Case Reports

It should consist of the title, summary, key words, summary in English, key-words, introduction, case report, discussion and references, the case or the cases should be worth to be presented, it should contribute to literature, and all of them should not exceed 5 papers in (A4) sizes.

### Review

It should include new topics, the own experiences of the author, if possible, and the references also. It should consist of the title in Turkish, the summary, the key-words, the title in English, the summary in English and the keywords in English.

### Letters to the Editor

They should be essays in the "review" manner in various topics or the essays concerning the articles published in the Turkish Journal of Endocrinology and Metabolism with the contributive content or contents as questions that do not exceed 200 words.

### Scientific Letters

The manuscripts should be error-free in the summaries compiled from the articles in other journals, the author names (surname, name) should be written, the journal title should be written with its original abbreviation, its year should be indicated and, the name and he surname of the translator should be indicated under the manuscript.

### Correspondence

All correspondences can be done to the following postal address or to the following e-mail address, where the journal editorial resides:

Address: Ankara University Faculty of Medicine, Department of Endocrinology and Metabolism, Ankara, Turkey

Phone: +90 312 508 21 00

Fax: +90 312 309 45 05

E-mail: [nilgun.baskal@temd.org.tr](mailto:nilgun.baskal@temd.org.tr)

"This journal licenced under the terms of the [Creative Commons 4.0 International Licence \(CC BY-NC-SA 4.0\)](https://creativecommons.org/licenses/by-nc-sa/4.0/)"



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

March / Mart 2021 Vol / Cilt: 25 No / Sayı: 1

## CONTENTS

### Original Articles

- 1** Prevalence and Awareness of Hypertension in Seven Distinct Geographic Regions of Turkey: The SEMT HT Study  
Türkiye'nin Yedi Farklı Coğrafi Bölgesinde Hipertansiyon Sıklığı ve Farkındalığı: TEMD HT Çalışması  
Fahri Bayram, Özgür Demir, Tevfik Sabuncu, Mehmet Ali Eren, Aydın Vedia Gedik, Demet Çorapçioğlu, Ahmet Kaya
- 11** Publication Outcomes for Oral Presentations at Congresses of Endocrinology and Metabolic Diseases of Turkey: Analysis of Twenty Years  
Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi Sözlü Sunumlarının Yayına Dönüşüm Oranları: Yirmi Yılın Analizi  
Emre Sedar Saygılı, Ersen Karakılıç, Süleyman Nahit Şendur
- 21** Clinical Spectrum and Outcome of Patients with Graves' Disease: A Single-Center Experience from a Tertiary Care Institution in the Kashmir Valley, India  
Graves Hastalığı Olan Hastaların Klinik Spektrumu ve Sonuçları:  
Keşmir Vadisindeki (Hindistan) Üçüncü Basamak Bir Sağlık Kurumunda Tek-Merkezli Deneyim  
Mohammad Hayat Bhat, Javaid Ahmad Bhat, Shariq Rashid Masoodi, Waseem Qureshi, Junaid Rashid Dar, Moomin Hussain Bhat
- 32** Evaluation of Oxidative Stress with a New Method in Differentiated Thyroid Cancer Patients on Thyrotrophin Suppression Treatment  
Tirotropin Süpresyon Tedavisi Alan Diferansiye Tiroid Kanseri Hastalarda Oksidatif Stresin Yeni Bir Metot ile Değerlendirilmesi  
Abbas Ali Tam, Didem Özdemir, Nagihan Beştepe, Afra Alkan, Sevgül Fakı, Özcan Erel, Reyhan Ersoy, Bekir Çakır
- 39** Patients with Ectopic Posterior Pituitary: Report of Six Cases  
Ektopik Posterior Hipofizi Olan Hastalar: Altı Olgunun Sunumu  
Hatice Özışık, Banu Sarer Yürekli, Ömer Kitiş, Mehmet Erdoğan, Füsün Saygılı
- 46** Investigation of Survivin Promoter -31 G/C Polymorphism and Survivin Levels in Acromegaly  
Akromegalide Survivin Promoterinin -31 G/C Polimorfizmi ve Survivin Düzeylerinin Araştırılması  
Muzaffer İlhan, Saime Turan, Seda Turgut, Gurbet Korkmaz, Nazlı Ezgi Özkan, Özcan Karaman, İlhan Yaylım, Ertuğrul Taşan
- 54** Pheochromocytoma: 16 Years of Experience in a Single Center  
Feokromasitoma: Tek Merkezde 16 Yıllık Deneyim  
Başak Özgen Saydam, Süleyman Cem Adıyaman, Ozan Bozkurt, Ömer Demir, Mehmet Ali Koçdor, Kutsal Yörükoğlu, Mustafa Seçil, Serkan Yener
- 68** Evaluation of Influenza, Pneumococcus, Zoster, Measles, Diphtheria, and Pertussis Vaccination Rates in Patients with Type 1 and Type 2 Diabetes Mellitus; a Single-Center Experience from Turkey  
Diabetes Mellitus Tanılı Hastalarda İnfluenza, Pnömonokok, Zoster, Kızamık, Difteri ve Boğmaca Aşılama Oranlarının Değerlendirilmesi; Türkiye'den Tek Merkez Deneyimi  
Aylia Yeşilova, Müge Bilge, Neslihan Özsoy, Mine Adaş



SOCIETY OF  
ENDOCRINOLOGY AND  
METABOLISM OF  
TURKEY

# Turkish Journal of Endocrinology and Metabolism

JOURNAL OF THE SOCIETY OF ENDOCRINOLOGY AND METABOLISM OF TURKEY

- 78** Metabolic Age: A New Predictor for Metabolic Syndrome  
Metabolik Yaş: Metabolik Sendrom İçin Yeni Bir Öngördürücü  
Ramin Mehrdad, Hamidreza Pouragha, Mohadeseh Vesal, Gholamreza Pouryaghoub,  
Mahdiyeh Naderzadeh, Zahra Banafsheh Alemohammad
- 87** Does Blood Glucose Regulation in Adults with Type 2 Diabetes Affect Exocrine Pancreatic Functions?  
Tip 2 Diyabetli Erişkinlerde Kan Şekeri Regülasyonu Ekzokrin Pankreas Fonksiyonlarını Etkiler mi?  
Sami Fidan, Savaş Volkan Kışioğlu, Celal Kurtuluş Buruk, Elif Ateş,  
Arif Mansur Coşar, Halil Önder Ersöz, Orhan Özgür
- 95** Serum Irisin Levels in Cigarette Smokers  
Sigara İçenlerde Serum İrisin Düzeyleri  
Birgül Kirel, İbrahim Özkan Alataş
- 102** MTHFR C677T Polymorphism in Turkish Women with Polycystic Ovary Syndrome  
Polikistik Over Sendromlu Türk Kadınlarında MTHFR C677T Polimorfizmi  
Seher Polat, Yasin Şimşek

## Review Article

- 113** Pharmacotherapy and Neoteric Dietary Approaches for Polycystic Ovary Syndrome: A Systematic Review  
Polikistik Over Sendromu İçin Farmakoterapi ve Neoterik Diyet Yaklaşımları: Sistematik Bir Derleme  
Tayyab Hamid Malik, Hussnain Ali, Amina Hassan, Junaid Qayyum, Arfah Naseem

## Case Reports

- 123** SRY-Positive 46XX Testicular Disorder of Sex Development  
as a Rare Cause of Male Hypergonadotropic Hypogonadism: A Case Report  
Erkek Hipergonadotropik Hipogonadizmin Nadir Bir Sebebi Olarak  
SRY Pozitif 46XX Testiküler Cinsel Gelişim Bozukluğu: Olgu Sunumu  
Mustafa Can, Muhammet Kocabaş, İlker Çordan, Hatice Çalışkan Burgucu,  
Melia Karaköse, Mustafa Kulaksızoğlu, Feridun Karakurt
- 129** A Case Report of Dapagliflozin-Induced Nodular Vasculitis  
Dapagliflozin İlişkili Nodüler Vaskülit Olgu Sunumu  
Muhammet Kocabaş, Zeliha Yarar, İlker Çordan, Mustafa Can, Hatice Çalışkan Burgucu, Harun Aydemir,  
Melia Karaköse, Mustafa Kulaksızoğlu, Feridun Karakurt