

# CONFERENCE PAPER

## An Overview of the History of Turkish Urology

### Abstract

This study presents a concise overview of the historical development of urology in Türkiye from the late Ottoman period to the present day. The research traces early urological practices such as surgical interventions for bladder stones and contextualizes the emergence of urology as a distinct medical discipline. Key developments during the Republican period, including institutionalization, academic training, and the influence of European medical models, are highlighted. The contributions of pioneering figures and the evolution of urological education reflect Türkiye's broader modernization efforts in medical sciences. Through a literature-based historical analysis, this work aims to illuminate the milestones, transformations, and legacies that have shaped the trajectory of Turkish urology.

**Key words:** Urology, History of medicine, Türkiye, Ottoman Medicine, Republican Era, Medical education

Received: 20 Sep 2025; Accepted: 27 Sep 2025; Online published: 7 Oct 2025  
**Research on History of Medicine/ 2025 Oct; 14(Suppl. 1): S15-S20.**

Alim Koşar (M.D.)<sup>1</sup>  
Fuat Ince (Ph.D.)<sup>1</sup>

1- Department of History of Medicine and Ethics, Faculty of Medicine, Süleyman Demirel University, Isparta, Türkiye

### Correspondence:

Fuat Ince  
Department of History of Medicine and Ethics, Faculty of Medicine, Süleyman Demirel University, Isparta, Türkiye

**e-mail:** incefuat@gmail.com

### Citation:

Koşar, A., and Ince, F., 2025. An Overview of the History of Turkish Urology. *Res Hist Med*, 14(Suppl. 1), pp. S15-S20. doi: 10.30476/rhm.2025.51249.

Copyright: © Journal of Research on History of Medicine. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited non-commercially.



## Introduction

The history of urology in Türkiye is intricately intertwined with the broader development of medical sciences in the region. While modern urology emerged as a distinct specialty in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, its foundations can be traced back to Ottoman medical traditions, which were themselves influenced by Greco-Roman, Persian, and Islamic sources (Yaman, and Baltacı, 1996, pp. 181-182). Pre-modern Ottoman texts discussed conditions such as bladder stones and urinary retention, and surgical instruments were designed to address these issues (Solok, 2010, pp. 219-221).

The establishment of Gülhane Military Medical Academy in 1898 marked a pivotal point in the institutional development of urology, offering formal training and research opportunities (Verit, Ürkmez, and Tellaloğlu, 2019, pp. 317-318). With the founding of the Republic in 1923, Türkiye witnessed a systematic modernization of its medical infrastructure. This period saw the consolidation of urology as an independent discipline, facilitated by academic exchanges with European institutions and the return of physicians trained abroad (Bedük, 2015, pp. 46-47).

As universities and medical faculties expanded, so did the presence of urology departments. The progressive integration of surgical innovations and medical specialization during this era paralleled broader advances in Turkish surgery and higher education (Ceylan, 2012, pp. 70-71, 110-111).

This study aims to present a structured overview of these developments through a historical lens.

## Materials and Methods

This study adopts a narrative-based historical approach that focuses on the development of urology in Türkiye from the late Ottoman period to the present day. It draws on a wide variety of sources, including peer-reviewed journal articles, scientific books, institutional history studies, and professional association publications.

The sources were selected based on their relevance, credibility, and accessibility, prioritizing publications available through open-access platforms such as DergiPark, PubMed, and institutional repositories. Special emphasis has been placed on the contributions of the Turkish Urology Association as presented in the sources examined and on the historical materials provided from the official archives of the Turkish Urology Museum.

These sources were critically analyzed and thematically categorized to trace the chronological and institutional evolution of urology as a medical discipline in Türkiye. (Table 1) While the study remains descriptive in scope, it follows a thematic structure that reflects pivotal aspects such as institutionalization, academic leadership, educational transformation, and international influences. The





integrity of all interpretations has been ensured through cross-referencing with multiple academic sources and adherence to publication ethics.

**Table 1:** Characteristics

Period	Key Developments	Institution(s)
Late Ottoman Period	Initial surgical treatments for bladder stones; beginnings of specialization	Military medical schools
Early Republican Era (1923–1950)	Formal establishment of urology departments	Istanbul University, Ankara University
Mid-20 <sup>th</sup> Century (1950–1980)	Expansion of urology residency programs; influence of European education	Hacettepe University, Ege University
Late 20 <sup>th</sup> Century – Present	Subspecialization and technological integration in urology	All major medical faculties in Türkiye

## Results

### Institutionalization in the Republican Period

The foundation of the Republic in 1923 initiated a period of structural reforms in higher education and healthcare services in Türkiye. Urology began to take root as an independent medical discipline, especially with the establishment of academic chairs in major universities such as Istanbul University and Ankara University (Yaman, and Baltacı, 1996, pp. 181–183; Bedük, 2015, pp. 46–49).

The institutionalization process was further supported by the modernization of medical curricula and the integration of European medical models, which had already influenced Ottoman medicine through figures trained in France and Germany (Verit, Ürkmez, and Tellaloğlu, 2019, pp. 317–319).

State support and the increasing number of university-affiliated hospitals led to the formation of dedicated urology departments, often shaped by the expertise of returning physicians educated abroad—particularly in Germany and France (Solok, 2010, pp. 219–225).

These efforts culminated in the establishment of the Turkish Urology Association in 1933, which played a central role in promoting academic collaboration, organizing congresses, and standardizing training (Bedük, 2015, pp. 47–48).

### Pioneering Figures and Academic Milestones

Several pioneering figures shaped the early development of Turkish urology. Prof. Cemil Topuzlu, a renowned Ottoman surgeon, laid the early groundwork for genitourinary surgery. In the Republican era, Prof. Sabit Erduran and Prof. Nihat Reşat Belger are often credited with founding modern urology departments and mentoring the first generation of specialized urologists (Ceylan, 2012, pp. 70–71, 111; Verit, Ürkmez, and Tellaloğlu, 2019, pp. 317–318; Yaman, and Baltacı, 1996, pp. 181–183; Solok, 2010, pp. 219–225).





The Turkish Urology Association became a hub for academic activity, contributing to the regular publication of urological research and the organization of national congresses. Notably, the “*First National Urology Congress*” held in 1965 marked a key milestone in academic consolidation (Bedük, 2015, pp. 46–47).

### **Urology Education and Western Influence**

Medical education reforms introduced in the early Republican period laid the foundation for systematic urology training. Urology became a recognized specialty within the broader medical education framework, with specific curricula, rotations, and board examinations (Yaman, and Baltacı, 1996, pp. 181–183; Ceylan, 2012, p. 111).

Collaboration with Western institutions, especially in Germany and France, enabled knowledge transfer and the importation of surgical techniques, equipment, and academic standards. Many Turkish urologists completed fellowships abroad and returned to Türkiye as academic leaders. The influence of Western literature and training models is evident in the shaping of textbooks, clinical guidelines, and postgraduate education programs (Verit, Ürkmez, and Tellaloğlu, 2019, pp. 317–319; Solok, 2010, pp. 219–225; Bedük, 2015, pp. 46–47).

### **Discussion**

The evolution of Turkish urology reflects a broader transformation in the development of modern medicine in the country. The institutionalization of urology as a separate specialty, the emergence of distinguished academic figures, and the restructuring of educational programs were all emblematic of Türkiye’s efforts to align with Western scientific paradigms. These efforts not only modernized the practice of urology but also fostered the establishment of a professional identity among urologists (Verit, Ürkmez, and Tellaloğlu, 2019, pp. 317–319; Yaman, and Baltacı, 1996, pp. 181–183; Bedük, 2015, pp. 46–47).

When compared with other medical specialties in Türkiye, urology distinguished itself by early institutional organization and sustained academic output. Its formal recognition in medical curricula and the founding of the Turkish Urological Association in 1933 highlight its central role in shaping specialized medical education and practice. The academic contributions of leading figures such as Prof. Sabit Erduran and Prof. Nihat Reşat Belger laid the groundwork for future generations and further expansion of the field (Solok, 2010, pp. 219–225; Ceylan, 2012, pp. 70–71, 111).

Cross-national comparisons reveal that Türkiye’s trajectory mirrors that of countries like Germany and France, where urology emerged from general surgery and evolved into a self-standing specialty. The influence of European training on Turkish medical professionals facilitated a smoother transition and adaptation of Western models (Verit, Ürkmez, and Tellaloğlu, 2019, p. 318; Ceylan,



2012, p. 111).

Today, urology in Türkiye continues to develop, with the Turkish Urology Museum playing a central role in preserving historical memory and promoting scholarly reflection on the specialty's heritage (Bedük, 2015, pp. 46–49). However, gaps remain in systematic archival preservation and comprehensive historiography, particularly in relation to regional contributions and inter-disciplinary collaborations.

### Conclusion

The historical trajectory of urology in Türkiye is a reflection of the country's broader journey in modernizing its medical sciences. From its Ottoman roots influenced by Greco-Arabic medicine to its formal recognition and academic structuring during the Republican period, Turkish urology has evolved into a well-established specialty. This development has been driven by institutional reforms, international collaborations, and the commitment of pioneering physicians to scientific progress (Yaman, and Baltacı, 1996, pp. 181–183; Verit, Ürkmez, and Tellaloğlu, 2019, pp. 317–319; Bedük, 2015, pp. 46–47).

The Turkish Urology Association and related academic institutions have played a critical role in consolidating the discipline and enhancing research capacity in the field. Furthermore, the establishment of the Turkish Urology Museum and ongoing documentation efforts demonstrate a growing recognition of the need to preserve the field's rich historical legacy (Bedük, 2015, pp. 46–49; Ceylan, 2012, p. 111).

Despite significant progress, gaps remain in integrating regional perspectives and interdisciplinary approaches into the historiography of Turkish urology. Future studies should aim to address these lacunae by leveraging both national archives and oral histories to enrich our understanding of the specialty's development.

By reflecting on the past, this study underscores the enduring value of historical inquiry in informing the future trajectory of medical sciences in Türkiye and beyond.

### Acknowledgements

The author acknowledges the assistance of AI-supported research tools, particularly ScholarGPT, for aiding in the literature review and structuring historical data. All content has been reviewed and edited by the author to ensure accuracy, coherence, and academic integrity.

### Authors' Contribution

The authors confirm their contribution to the paper as follows: Fuat Ince: conceptualization, writing, reviewing, editing. Alim Koşar: Validation, reviewing,



and editing. All authors read and approved the final version of the work.

**Funding**

None.

**Conflict of Interest**

None.

**References**

- Bedük, Y., 2015. Türkiye’de Üroonkoloji Tarihçesi: Mesane Tümörleri. *Üroonkoloji Bülteni*, 14, pp. 46–49. [in Turkish]
- Ceylan, İ., 2012. *Türklerde Cerrahinin Gelişimi*. Ankara: Türk Cerrahi Derneği Yayınları. [in Turkish]
- Solok, V., 2010. Osmanlı Dönemi Ürolojisinde Üç İsim. *Türk Üroloji Dergisi*, 36(3), pp. 219–225. [in Turkish]
- Verit, A., Ürkmez, A., and Tellaloğlu, S., 2019. History of Establishment and Evaluation of Ottoman-Turkish Urology Inside the Surgical Science. *North Clin Istanbul*, 6(3), pp. 317–319.
- Yaman, L.S., and Baltacı, S., 1996. Üroloji Tarihçesine Bir Bakış. *Ankara Üniversitesi Tıp Fakültesi Mecmuası*, 49(4), pp. 181–183. [in Turkish]

