The Lifelong Mysterious Relapsing “Kidney” Disease of the Founder of Turkey; Atatürk (1881–1938) in Connection with European Medical and Political History

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Keywords

History of medicine · History of urology · Mustafa Kemal Atatürk · Kidney disease · Ottoman

Abstract

Introduction: Although Mustafa Kemal Atatürk (1881–1938) was a national hero with his intrepid and enlightened attempts to establish modern Turkey from the remnants of Ottoman heritage, he had been suffering from lifelong “kidney disease” that appeared with intermittent flank pain and fever without an identified source. However, we think that this physical pain that he endured only increased his motivation to focus on his military and political aims. **Methods & Results:** In this historical review article, we have focused on his personal medical life and specifically his “kidneys” from the beginning of the complaint till his death through European medical and political history with geographic locations and speculated upon it via past, near past, and recent medical literature. **Conclusion:** Mustafa Kemal Atatürk, the great military and political leader for his country, had always suffered from uro/nephrological problems throughout his life. We

think that this was one of the reasons that urology has been privileged and thus to be the oldest separated medical surgical branch in Turkey and to some significant extent with European urological history.

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Introduction

Mustafa Kemal Atatürk was born in Thessaloniki, Greece, a charming city by the sea, in 1881 as an Ottoman citizen. It is noteworthy that he was the founder of a modern Turkey that emerged after more than 600 years of the Ottoman Empire that played a significant role in European history up to and including World War 1. Mustafa Kemal was educated and trained as an Ottoman military official and then served in difficult conditions in various parts of the vast empire during its demise and eventual collapse (Fig. 1). He may have been considered as a heavy smoker and drinker and these most probably were the main reasons behind his chronic illnesses. It was reported that he had been suffering from various diseases such as

Fig. 1. Youthful “Mustafa Kemal Atatürk” in military school.

malaria, eye and ear infections, angina pectoris, bone fractures, and cirrhosis as well as the liver disease that finally caused his death due to his mortality reason at the age of 57 years [1–3]. In this study, we have reviewed the literature regarding his symptoms in the context of nephrology and urology paying close attention to the related history of medicine from the recent past to the present.

Main Text

During his youth on the Balkan Peninsula during military training, he suffered from non-/gonococcal urethritis, a troublesome urological disease which was relatively common at the time, before the antibiotic revolution triggered by the pioneering discovery of penicillin by Scottish physician Alexander Fleming at St Mary’s Hospital in London in 1928. This grandiose period of antibiotics lasted till 1950 before the beginning of widespread drug resistance [1, 2, 4]. Pyelonephritis should be mentioned secondarily in his reported medical history as he had suffered from this kidney disease many times during his life along with urethritis, which may be considered a predisposing factor to upper urinary system infection in an ascendant way, although this connection was rarely reported in the contemporary medical literature [1, 5]. The first attack of flank pain accompanying high fever made him bedridden during Ottoman-Italian clashes in Tripoli (Trablus) in Northern Africa in 1911 when he was a major official. There was a remission (or undocumented period

Color version available online

Fig. 2. “M. K. Atatürk” in the costume of a past Ottoman soldier (*Janissary*), Sofia, Bulgaria, 1913.

in his medical history) military attaché in the Ottoman consulate in Sofia, the Bulgarian capital (October 1913–1914), where he found ample opportunity to participate in social activities (Fig. 2). He suffered from a second attack during the raging battles of the Gallipoli campaign (zone of Troy-Dardanelles, UNESCO World Heritage Centre) in World War 1 where Ottoman and German troops resisted the forces of the British Empire for 2 long years (1915–1916). He was initially denied hospitalization, but close to the end of the campaign, he contracted pneumonia and was sent to Istanbul for medical treatment at the insistence of the Ottoman command [2, 3]. After convalescing, the Ottoman rulers posted him to Eastern Anatolia in 1916 to face tsarist Russian pressure; however, the treacherous winter/war conditions forced the army to retreat to southeastern provinces such as the riverside (Tigris) city of Diyarbakir, an endemic region for urethral calculi, in upper Mesopotamia. His flank pain flared up largely attributed to the winter conditions and low spirits [2]. Nevertheless, urolithiasis may be the root of his numerous clinical relapses; however, this was not able to be confirmed due to a lack of X-ray images. Actually, X-rays first began to be used in 1897 in Istanbul at the first Ottoman University Hospital. Initially, they were

Color version available online

Fig. 3. Pioneer X-ray equipment in the first Ottoman University Hospital (Istanbul, 1897).

carried out for patients with extremity fractures who returned from the war on the Greek front, immediately after the invention of Roentgen equipment by German scientist W. Conrad Roentgen (1845–1923) for medical purposes (1895) [6, 7] (Fig. 3).

The last Ottoman Sultan Vahdettin had planned a visit to the German Empire, the Ottoman's main ally, with a delegation which was to include Mustafa Kemal in 1917. His flank pain relapsed on the return journey to Istanbul, and he took time to recuperate at the hotel Pera Palas – built in 1892 for the purpose of hosting the passengers of the Orient Express – for a few weeks; however, his intermittent flank pain recurred due to the possible renal colic, and then after his recovery, he was given official permission via a high-rank health consultation to take a train trip from Istanbul to Vienna in the final years of the Austro-Hungarian Empire for a top level health service of the time [2]. The famous pioneering urologist of the time Prof. Otto Zuckerkandle (1861–1921), – president of the Second and Third Congresses of the German Society of Urology in 1909 and 1911 and also founder of the Wiener Urological Society (1919), examined Mustafa Kemal, and apart from a urinary infection caused by *E. coli*, no other conditions were discovered after tests [2, 8–10] (Fig. 4). Based on available evidence, we think that our hypothesis that Mustafa Kemal was an undiagnosed urolithiasis pa-

Fig. 4. Prof. Otto Zuckerkandle (1861–1921), German pioneer urologist.

Fig. 5. Atatürk stayed in the Rudolf Hof Hotel in Karlsbad for his thermal therapy (1918).

tient due to the fact that *E. coli* is the main accompanying and inducing pathogen of stone disease – and also pyelonephritis – is corroborated [11, 12]. Nevertheless, Prof. Otto Zuckerkandle referred him to Karlsbad thermal springs (now in Czechia) for a cure. Interestingly, Hermann Boerhaave (1668–1738) as an important figure in the treatment of urolithiasis in the eighteenth century prescribed a hot bath in order to induce vasodilation in addition to liquid intake and exercises for urinary stone disease in his article “*Institutiones medicae*” [13]. Nevertheless, we can never confirm neither O. Zuckerkandle took care this reference nor the reason of his suggestion of hot bath treatment to M. Kemal. Moreover, a brilliant and experienced clinician such as O. Zuckerkandle might

Fig. 6. Daily treatment list for Atatürk in his own handwriting in Ottoman and French that was given in Karlsbad as the cure for “kidney pain.”

have known that chronic back pain due to muscle spasms (which also fits in with the symptoms displayed by M. Kemal) could also be relieved by hot baths [14].

During his first days in Karlsbad in his room of the Rudolf Hof Hotel, Atatürk (via Turkish surname law in 1934) described the initial visits with Dr. Wermer in his memories as follows [15] (Fig. 5):...“A tidy doctor came into my room, in our introductory conversation, the doctor asked me how I could have had the title of Pasha (The highest military degree in Ottoman times, general official) bestowed upon meet such a young age (37) while glancing through the patient records and I replied that it may have been due to giving adequate service to my country... Then I complained to the doctor that the room seemed too small for my liking. He answered that luxury was of a much lesser concern than my cure and overall health. I realized that the doctor was right and I respected him greatly for his professionalism and then I began to write down my daily treatment schedule (that consisted mainly of various forms of water consumption at the beginning and end of the day and between meals as well as taking hot muddy/-water baths) between 07:00 and 22:00 respectively”.... (Fig. 6).

Although, he was not completely pleased about the results of the treatment because the symptoms of his disease had not fully diminished, he held many semi-official political meetings with European elites and bureaucrats and involved himself in the social life of Karlsbad [15]. More-

Fig. 7. 2,000-year-old Roman “thermae,” recently reopened for public use, was added to the UNESCO World Heritage tentative list (2018) located in the Sarikaya district of Yozgat Province, Central Anatolia, just 200 km away from Havza as the crow flies.

over, we think that the main gain of Karlsbad days in August 1918 was that Mustafa Kemal Atatürk’s sociopolitical philosophy about his country developed into its final form. He knew very well that the Ottoman political and social system was outdated and close to collapse, and he was intent on creating a European-style democracy in all its forms for his nation. Our speculation that is not as illogical as it may at first appear that although Prof. Otto Zuckerkandle sent him for medical reasons to Karlsbad, this attempt let his mind to finalize his political theories of the modern Turkey. Just 6 months after Karlsbad, he immediately began to implement his socio-politic-military-economic revolution with public support, and he relocated from Istanbul to Anatolia via sea way to Samsun on the Black Sea coast; however, the old familiar symptoms of fever and flank pain (pyelonephritis) were to return following him, and he was forced to take rest 10 days in Havza (known in antiquity by its Roman name as “Thermee Phoseemeomitearem” – thermal region –) a village at the inner side of in central Anatolia which has always been renowned for its Hammam (Turkish baths) since the East Roman (Byzantine) times due to its natural hot spring waters. It was reported that Havza was devastated by an earthquake at the beginning of previous millennium (1050), and hot water flooded the streets of the city for 9 days, resulting in many deaths, and the Romans rebuilt the city in a manner where they could control and exploit the hot water [16]. Roman thermal baths (balneae) were the main public meeting points, and due to the improved architecture and building techniques, balneae turned into huge thermal spas (thermae) where soldiers returning from war were sent to relax and recuperate and also for medical purposes as was seen in the clinical prac-

tices of great Roman physicians such as Galen and Celsus [17] (Fig. 7).

Atatürk made special mention of the improvement in his health situation after taking a thermal cure at Havza in his memoirs [3]. Interestingly, although these kinds of placebo treatments can be regarded as incompatible with modern medical science, there were some reports reviewed by Diamandopoulos, about the beneficial effects of spa treatment of pyelonephritis, with renal failure and also urolithiasis even in respected contemporary literature from the recent past [18, 19];

1. The thermal treatment of urinary lithiasis at Marienbad (*Therme in Chech Rep.*). Krizek and Zaloudek. *Rein Foie*. 1965;7:137-41.
2. Sauna baths in the treatment of chronic renal failure. Snyder D, Merrill JP. *Trans Am Soc Artif Intern Organs*. 1966;12:188-92.
3. Sweating treatment for chronic renal failure. Lacher JW, Schrier RW. *Nephron*. 1978;21:255-9. "This removal of urea, water and salt suggests that sweating could be used to treat uraemia in conjunction with charcoal hemoperfusion."
4. Stimulated sweating in chronic renal failure. Man in 't Veld AJ, van Maanen JH, Schicht IM. *Br Med J*. 1978;15:172-3. "With hot baths and/or saunas the urea and creatinine in patients with Renal insufficiency falls."

Moreover, it should be considered surprising to notice that hot bath still being as a treatment option for chronic pyelonephritis with renal failure in current Chinese medicine and can find a place at the current modern literature (e.g., Ye et al. [20]).

Nevertheless, Atatürk had some other renal colic/flank pain attacks around the times of the foundation of the republic in 1923 and he continued spa treatments for his whole life thereafter, and then the disturbance of his hepatobiliary symptoms such as abdominal hydrodistention and jaundice surpassed the urinary system ones that never reported again [1-3]. In our opinion, previous multiple

bouts of pyelonephritis led to renal insufficiency also played a role in his death and cirrhosis. Hepatorenal syndrome is now a well-defined pathology as severe clinical situation in end-stage cirrhosis due to endogenous hydrodynamics such as increased splenic blood flow, decreased central volume, and activation of vasoconstrictor systems resulted in extreme kidney vasoconstriction leading to decreased glomerular filtration rate [21]. He also needed intermittent catheterization in the time before his death in 1938 [3].

Conclusion

Mustafa Kemal Atatürk, the great military and political leader for his country had always suffered from urological problems which mainly manifested themselves as flank pain throughout his life, and depending on this phenomenon, we think that this was one of the reasons that urology had the privilege of being the oldest branch of medicine (Association of Turkish Urology, est. 1933) in Ottoman times/Turkey [6].

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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Author Contributions

Ayhan Verit: study design and construction of the manuscript. Serkan Akan: data collection and scientific and Art checking of the manuscript. Ateş Kadioğlu: the manuscript hypotheses and final checking of the manuscript.

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