THE USE OF PLANTS FOR THE TREATMENT OF RENAL AILMENTS
Alain Touwaide
Institute for the Preservation of Medical Traditions, Washington, DC - USA

This paper will introduce the roundtable devoted to the use of plants in the treatment of renal ailments through history. It will draw on the contributions of the speakers and highlight the current state of research in the field. In so doing, it will also identify sectors that need to be investigated, thus opening new avenues for fresh research. A specific attention will be devoted to methodological issues which are often critical.

HERBAL MEDICINE AND RENAL DISEASE: A SURVEY OF CRETAN MEDICINAL PLANTS
Constantinos Trompoukis, Marios Papadakis
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Herbs are widely used for medicinal purposes, as their curative properties are now well documented and reported in several clinical studies. Numerous Cretan herbs are traditionally used for their medicinal properties in renal disease. The aim of this work is to offer a first insight into the use of plants traditionally used in the Cretan area for renal ailments. Therefore, a detailed survey of the relevant literature was undertaken. The references concerning the usage of Cretan medicinal plants for renal disease were found and are discussed. We also present the active ingredients and scientific names of such herbs and compare with the conventional drugs used in modern pharmacuetics.

PHARMACEUTICAL PLANTS WITH NEPHROLOGICAL INDICATIONS IN THE HIPPOCRATIC BOTANIC GARDENS IN KOS
Stefanos Geroulanos, Othon Emmanouel
International Hippocratic Foundation, Kos - Greece

With the aid of the Prefecture of South Aegean, the Municipality of Kos, the NGOs Horizon, Hellas Clean, Hippocrates 2500 and the Natural products company APIVITA, the International Hippocratic Foundation has planted behind the building of the Foundation housing an Exhibition/Museum on Hippocratic Medicine, a Botanical Garden with 220 different sorts of pharmaceutical plants mentioned in “The Hippocratic Collection” with its 70 books.

In this Collection, gathered together from the librarians of the Bibliotheca Alexandrina around 300 BC, the well known “corpus hippocraticum” two hundred forty eight (248) pharmaceutical plants are mentioned (Kiapokas M., 2007). Most of them were used for gynaecological affections and less for other indications. However at least ten plants out of 248 were used as diuretics (asparagus acutifolius, delphinium staphis agria, inula viscosa & graveolens, crithmum maritimum, fraxinus ornus, mentha pulegium, nata graevolens, aipium graevolens, cucumis sativus, and allium sativum), three as painkillers for urological affections (athamanta cretensis, silphium, papaver somniferum), one plant against dysuria (adiantum kalliphyllum) and one against kidney infection (gnaphalium ephedrae).

Not mentioned in the corpus hippocraticum as uro-nephrological drugs but mentioned for another indication and used in Antiquity for uro-nephrological indications are another twenty seven (27) plants used as diuretics, six used against kidney disorders, three against dysuria, four are spasmyotics or were used against colic pains, four were used against podagra, four against kidney stones, three against cystitis, two against leukomoea, one against hyperplasia of the prostate and two against diabetes.

In total 72 plants are growing in the Botanical Hippocrates Garden in Kos, that were planted here either for their uro-nephrological or for another indication mentioned by the Hippocratic authors. However 56 of them mentioned for other indications were also widely used in Antiquity against uro-nephrological disorders. Most of this works are growing in the Botanical Garden of Kos, in the exhibitions and/or in the valley of the ancient Hippocratic city.

ON UROSCOPY TREATISE IN THE CHILANDAR MEDICAL CODEX N. 517: ITS CONTENTS AND ORIGIN
Gordana Šubaric-Gorgieva1, Athanasios Diamandopoulos2
1Medical Faculty, Kosovska Mitrovica - Serbia; 2Renal Unit, St. Andrew’s State regional Hospital, Patras - Greece

The current paper aims to evaluate the Uroscopy treatise which exists as a distinctive chapter in the Chilandar Medical Codex N. 517, a comprehensive medieval medical compilation, preserved in the library of the Serbian Monastery Chilandar, on Mount Athos (Greece).

This coherent uroscopy manuscript is, actually, a textual continuation of the Codex introductory chapter De pulsibus, and has a precise incipit: “Here begins a Discourse on Recognizing Illness by Examining the Urine (‘Water’), while the explicit (“The end of the theory on urine, as Hippocrates, the philosopher says”), is written in two languages: Serbian and Greek. Beside the name of Hippocrates, mentioned three times in this chapter, and alleged citation of his work Aphorisms, the famous authors, also described as teachers or philosophers, such as Galen, Isaac Israel, Avicenna, Theophilus Protospatharius and Constantin the African are quoted. There are 56 passages on the Hippocratic definition of urine formation, differentiating and classifying urine according to the quantity, colours, consistence, smell and sediment. The physiological background of this work is the antique philosophical concept of Alcmaeon (isonomía), later defined as the Four-humour system of blood, phlegm, yellow and black bile, in the earliest medical compilation, preserved in the library of the Serbian Monastery Chilandar, on Mount Athos (Greece).

The Chilandar’s Uroscopy was already assessed as a typical medieval treatise based on the scientific medical knowledge of the Salerno and Montpellier schools (M. Grmek, R. Katić), but the correlation with the known and published Latin and/or Greek Uroscopy texts is still unclear. It does not contain any astrological or magic notions, or prayers for the sick. This Cyriclu manuscript, written in Serbian/Old-Slavic, is considered a unique copy, and probably is the transcript and/or translation of an older version (created in the 13th century).

In our survey, we compared the Chilandar Uroscopy with several accessible Latin translations of the authors mentioned above, together with IoannisACTUARIUS’ treatise Peri ouron (ed. L.L. Ideler). We found a considerable analogy...
with the work of Theophilus Protospatharios Liber Urinarum Teoghilli (Ar-
cella; ed. Hermann Liechtenstein, Venice, 1483). Remarkable resemblance
between two uroscopy treatises, in terms of their content and style, can
be found also in the preceding chapters - the pulse treatises. Finally, in the
Chilian Medical Codex N. 517 and Uroscopy text we found several important
components that are characteristic and crucial for the Articella, the main me-
dieval medical textbook.

**A PRELIMINARY COMPARISON BETWEEN GREEK AND TIBETAN
UROSCOPY**

Tsering Tiamchoe1, Constantinos Grivas2

1Exe. Member, Research Associate, Central Council of Tibetan Medicine, Gang
dar Medical Codex N. 517 and Uroscopy text we found several important
differences.

Examination of urine was certainly one of the basic diagnostic (or prognostic)
methods in ancient and Roman times. There are several scattered references
of the subject in Corpus Hippocraticum and the works of Galen, among others.
However, the surviving dedicated works on uroscopy (all titled “On Urine”) are
dated from 4th c. AD onwards (Magnus, Theophilus Protospatharios, Stephanos
of Alexandria, and Aetius Anagnostas). Uroscopy was preceded in the kidney as
Tibet is part of the Greek school of medicine sometime between the era of the
Tibetan king Songtsen Gampo (Song btan sgam po, 7th c. AD) and 900 AD.
Today Tibetan uroscopy is a living practice of traditional medicine, the main
diagnostic tool together with pulse diagnosis.

We proceeded with a parallel preliminary comparison between uroscopy
methods of Greek and Tibetan medical traditions. For that purpose we had to
examine closely a number of Greek (mainly Magnus, Theophilos and Steph-
angos works) and Tibetan texts (gYud dbzh, Sman dpad zla ba’i rgyal po etc.)
looking for similar parts or structure among them, but most importantly we
searched for identical special terms and similar theoretical approaches on
a particular phenomenon (like the appearance of sediments).

There were certainly some sound similarities between these traditions of uro-
copy, but we also found several important differences.

As with philosophical and other texts, Tibetan scholars demonstrated excep-
tional abilities in organizing (or re-organizing) translated texts, so for the moment
it seems difficult to discover a Greek text translated in Tibetan.

However, a lot more needs to be done in comparing these traditions, as well as to expand the
research to the Arabic one.

**THE CONCEPT OF KIDNEYS IN TRADITIONAL CHINESE MEDICINE**

Alexandros Titkisid

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Traditional Chinese Medicine, Athens - Greece

According to the Traditional Chinese Medicine (TCM) the human body is de-
veloped through the interaction of the 5 elements: wood, fire, earth, metal and
water. Each one of the elements creates different organs: liver, heart, spleen (di-
gestion), lungs and kidneys respectively. Created by the water element, kidneys
accommodate the genetic memory of the body or jing (essence), lungs and kidneys
respectively. Created by the water element, kidneys attract the water of the human body and discard part of it. TCM seem not to understand the function of producing and expelling urine in the glomerulus, as it is understood today. According to TCM this function is secondary importance.

The concept of kidneys is also examined closely in the preceding chapters - the pulse treatises. Finally, in the Chinese text we found several important
differences.

Kidneys accommodate the genetic memory of the body or jing (essence), the source of male or female sperm. This function can be attributed to the
adrenals. Kidneys are connected with marrow (testicles, bone marrow, brain,
spinal cord, nervous system), while in Western medicine ethroprotein (pro-
duced in the kidneys) stimulates red blood cell progenitors in bone marrow
to produce red cells. Kidneys are also connected with bones and skeleton
development, like the active form of vitamin D (produced in the kidneys) is
responsible for accumulation of Ca in the bones. The primordial memory is
expressed through the formation of one of the five types of souls, called zhi
(will), which resides in the kidneys. According to TCM the sentiment of fear
comes as a result of the water element threatening to extinguish the fire in the
heart. This fear is causing downward movements (the natural direction of the
water element), a very well-known phenomenon! Finally, kidneys are con-
nected with hair, ears and hearing.

As a conclusion it is clear that kidneys in TCM are perceived in a much broader
sense, including functions associated with the hormonal system, skeletal devel-
opment or even the sentiment of fear. Most importantly kidneys are considered
the foundation of the human body.

**DESCRIPTION OF UROLITHIASIS IN THE SOURCES OF TRADITIONAL
AYURVEDIC MEDICINE**

Mihail Subotyalov1, Vladimir Druzhinin2, Tatiana Sorokina2

1Professor, Novosibirsk State Pedagogical University, Novosibirsk - Russia;
2Lecturer, Department of Physiology, Novosibirsk State Medical University, No-
osibirsk - Russia; 3Professor, Head of the Department for the History of Medi-
cine, Peoples’ Friendship University of Russia, Moscow - Russia

Traditional texts of Ayurveda (āyurveda) contain a lot of information about
diseases related to the urinary system. Among them there is urolithiasis
(āsmārā) described in “Caraka-sanhitā”, “Susruta-sanhitā”, “Aṣṭāṅga-
hridaya-sanhitā”, “Madhava-nidāna”, etc.

Asmārā means āśmanarā, rāṭī, that is ‘the giver of stone’ (urolithiasis).

Developing of this disease is described in “Sūrṣrata-sanhitā” (2.3.4): Kapha
dosha comes in contact with urine (mūtra-saṃprkṛtaḥ), forming stones in the
bladder (vastī). According to “Caraka-sanhitā” (6.26.36), Vata dosha excis-
cates urine in the bladder, as well as semen. Pitta and Kapha, thus stone
usually is formed, similar to gallstones are formed when cow bile becomes dry.

The first signs of the disease (pūrva-rūpa), according to the “Aṣṭāṅga-
hridaya-sanhitā” (3.9.7- 8) are the following: distension of the bladder
(vastādydhamānaṃ), severe pain in this area (aṭtuk), goat smell of urine (basta-
ragarcha viivi), difficulties of urinating (mūtra-krocchra), the reflection of pain
in the umbilical area (nābhi), genitals and perineum (sveṇi).

Depending on causes, this disease is divided into 4 types: vātāja, pittāja,
kaphāja, and skṛukraja.

Vātāja is caused by Vata dosha. The patient feels severe pain, urine is sepa-
rated by drops. Stone usually is black or reddish color and has an irregular
shape – it seems like it’s coated of spikes.

Pittajā is caused by Pitta dosha. The patient feels fever in the bladder, the
stone is red, yellow, or black, shaped like a seed of the bhallataka plant (Lāt.
Semecarpus anacardium).

Kapha-ja is caused by Kapha dosha. The patient has a sense of pricking in
the bladder, a feeling of heaviness and coldness. The stone is large, smooth,
white or the color of honey.

These three types are also observed in childhood.

Skṛukrāja caused by semen in old age, manifested in the difficult urination
(mūtra-krōcchra), pain in the bladder (vasti-vedana), the scrotal oedema
(vṛṣaṇa-iothā). A poor prognosis is given for a long-term and long-standing
forms (cirotthīta).

**THE MIND BEHIND THE STRUCTURE. VESALIUS ON THE “FABRICA” OF
THE HUMAN BODY**

Giorgio Zanchi

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President Italian Society for the Study of Headache; Director Post-Graduate
Training Program in Neurology, Headache Centre, Department of Neurosci-
ences, Padua University Medical School, Padua - Italy

Next year we will both celebrate the birth and commemorate the death of
Andreas Vesalius (1514-1564), recognized as the founder of modern anat-
omy, in turn a fundament of the scientific revolution that brought to the ac-
ccomplishments of contemporary evidence-based medicine. Considering the
interest of an audience of nephrologists and of a speaker who is neurologist,
I will briefly examine the contribution of his main work “De humani corpo-
ris fabrica” to the knowledge of kidneys and brain. Both fascinating organs
are described by Vesalius, in their description the passion with which he engaged in his
research is vividly expressed, e.g. when he dismisses sharply the current
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ccomplishments of contemporary evidence-based medicine. Considering the
interest of an audience of nephrologists and of a speaker who is neurologist,
The association between hypertension and the kidney was first suggested by Professor Emeritus of Medicine, Athens University Medical School, Athens - Greece. The landmark experiment on the production of hypertension by partial constriction of the renal arteries, established the role of the kidneys in the genesis of hypertension. Almost 20 years later, when awareness of increased mortality in hypertension led to an analysis of the causes of death in hypertensive patients, it became clear that not only can the kidney cause hypertension, but hypertension can adversely affect the kidney. In particular, uraemia was the cause of death in almost one-half of the cases of malignant hypertension before antihypertensive treatment became available.

As far as essential hypertension is concerned, in a study published in 1955, of 500 essential hypertensive patients followed until death, 7% developed malignant hypertension, 42% proteinuria, and 18% renal insufficiency. The most recent advancement in our knowledge concerning the relationship of hypertension with kidney disease is the recognition of impaired renal function as a risk factor for the development of cardiovascular disease. This means that not only hypertension control can prevent deterioration of renal function, but also that hypertension treatment recommendations based on cardiovascular risk stratification should take into account the highest-risk status of patients with chronic kidney disease.

The spread of scientific knowledge from the Eastern shores of the Mediterranean to the West during the antiquity is very well documented. The same movement, a kind of pay-back, has attracted less interest. This latter movement, a kind of pay-back, is noteworthy that further mental efforts of Ukrainian clinicians continue the scientific progress successfully combining centuries. Prominent Kyiv University Basí in articles in the “Journal of medical” pointed criteria of differential diagnosis of chronic glomerulonephritis and renal amyloidosis with congestive kidney (1682), described the method of palpation wandering kidney (1864). The first milestone in the history of Ukrainian nephrology was in 1782, when a prominent physician of the XVIII century O. Shumlyanskyy graduated from the Kyiv-Mohyla Academy, and at the University of Strasbourg in the pages of his doctoral thesis described the capsule and the renal glomerulus far ahead in this English anatomist Bowman. In fact, the discovery that in the world of science associated with the names of the two researchers can be considered as a prelude of nephrology clinical science discipline.

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The association between hypertension and the kidney was first suggested by Richard Bright, who in 1836 observed that “the hypertrophy of the heart seems, in some degree, to have kept pace with the advance of disease of the kidneys”. The discovery of renin by Tigerstedt and Bergmann in 1898, and Goldblatt’s landmark experiment on the production of hypertension by partial constriction of the renal arteries, established the role of the kidneys in the genesis of hypertension. Almost 20 years later, when awareness of increased mortality in hypertension led to an analysis of the causes of death in hypertensive patients, it became clear that not only can the kidney cause hypertension, but hypertension can adversely affect the kidney. In particular, uraemia was the cause of death in almost one-half of the cases of malignant hypertension before antihypertensive treatment became available.

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Turkish origin. However, the vast majority of them were charlatans, sorcerers, or faith healers (priests, monks, hodzas). The main content of the preserved manuscripts of that era was a strange mixture of distorted remains of Hellenic/Byzantine and Western medieval knowledge with descriptions of the apocryphal medicine doings (prayers, sorceries, magic formulas, amulets, divinations).

During the 18th century the ideas of Enlightenment have had a major impact on Serbian culture (linguistic and educational reforms), on science and medicine, as well. Among the earliest scientific works that reflect a new era of rationalism was Zacharius Orphelin (1726–1785) opus: The Eternal Calendar which contains chapters on several science disciplines (physics, geography, astronomy, medicine); and unfinished book The Great Serbian Herbal Collection, with descriptions of about 500 herbs and, in addition to their Latin and Serbian/folk names, their medical, therapeutic and recreational effects. Among the most important and earliest publications and books of scientific medicine, were the works written by the Serbs from Vojvodina (duchy; at that time it was a province under the Habsburg Monarchy). The first educated Serbian doctors, J. Jovanov, the best k. Miloradovic completed their medical studies at the University of Halle, Germany. Apostolovic PhD thesis (Modum quo affectus animi in corpus humanum agunt) was published 1757, in Halle; Miloradovic, moreover, wrote and published three dissertations (Halle 1768; Budimp 1778). Strong influence of European medical schools is reflected in the increasing number of translations of significant works (mostly from German) and a substantial number of original works in various fields of medicine (hygiene, pediatrics, pharmacology, physiology, infectious diseases), written in Serbian language. Among many known names and works (E. Jankovic, P. Hadzic, P. Beric, V. Rakic), here we mention The Microbiology, a comprehensive book (550 pages) of an educational character, translated into Serbian by V. Stei, and published in 1826 in Vienna. The original was written in 1796 by Christoph Wilhelm Hufeland, a famous professor of medicine from Jena, Germany.

Turbulent events in the Balkans during the 19th and early 20th century: Serbian-Ottoman war (1876–1877), The Balkan Wars (1912–1913), The Great War (1914–1918) caused many devastating effects on society and definitely slowed down the development of the health system and medicine in general. The establishment of the faculty of medicine in Belgrade in 1920, had a crucial importance on the development of Serbian medicine and all its branches. The founders of the faculty were professors: Milan Jovanov - Batut (the dean), Vojislav Subbotic (surgeon), and Niko Miljanic (anatomist and surgeon). Furthermore, founding of the modern large hospitals and clinics by the famous professors and surgeons - Vladan Djordjevic, disciple of the Billroth; Mihajlo Petrovic, brigadier general of the Serbian Military Medical Corps, contributed to the strict enforcement of the scientific medical methods in daily practice. Since the majority of those professors were Paris ex-pupils and Francophiles, during the first half of 19th century, French medicine and literature dominated in Serbia. Within the Serbian literature of the history of medicine, one can find many records of renal patholody (dropsy, renal and bladder calculi, incontinence and urinary retention, hematuria), but these fragments are scattered throughout publications of varying value. However, nephrology - as a separate branch of medicine, developed relatively late: it was studied within the internal medicine. The urology was a part of surgery. Modern textbooks on nephrology and urology, in the 19th century, were supplemented and enriched with the progressive practice of the European urology. The rich heritage of this period is described in the books and textbooks of the famous seventeenth century urology and nephrology professor and surgeon: Christoff Wilhelm Hufeland (1762–1836). His most famous works were published in Vienna in 1808. His most significant is the book “Die Krankheiten des menschlichen Organismus”, which is being the only book in the Serbian language in the field of nephrology, dialysis and urology, here we highlight only three of them because of their comprehensiveness, pioneering character and perfect language: M. Nešković, V. Jovanović: Kidney Diseases, 1960 / S. Petković et al: Tumors, 1984 / Lj. Duknovski et al: Kidney diseases, 1999). Actually, extensive nephrology and urology chapters were published earlier, within the textbooks of Internal Medicine and Surgery. The first scientific papers in nephrology were published in The Serbian Archives of Medicine, the best known medical journal in Serbia, which is being the only one in Serbia since 1874. The first published works were those written by Serbian authors, as well as numerous translations and quotations from the foreign literature [H. Fameh von: On the frequency of nephritis in the army; Srp Arh (I): 7–8; 1895 / V. Subotic: On the kidney stones in Serbia; Srp Arh (II): 9–1899 / K. Müller: About nephritis due to spinal cord injury; Srp Arh (III): 2; 1896 / H. Horovitz: Pathogenesis and clinical features of albuminuria; Srp Arh (17) 9; 1911: 499–509], but also in other medical journals from Serbia [B. Stojanović: Functional testing and diagnosis of kidney disease; Medical Review (VI): 4; 1931].

The main sources for this survey were books, documents and data from the largest library in Belgrade: The University Library “S. Marković”, The National Library of Serbia, the Archives of the Serbian Academy of Science and Art; and Matica Srpska Library from Novi Sad.

### UROLOGICAL SURGERY IN AZERBAIJAN IN THE 20TH CENTURY

**Farid Alakbari**

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During the Middle Ages, the urological diseases in Azerbaijan were treated with the methods of the Islamic or Greco-Armenian medicine. The rich heritage of this medical school is reflected in the 11th–18th centuries’ manuscripts which are preserved in the Institute of Manuscripts of the Azerbaijan National Academy of Sciences. However, the modern practice of urological surgery started to spread in Azerbaijan from the beginning of the 20th century with the efforts of such scholars as M.M. Mirkasimov, M.A. Topchubashov and M. J. Javad Zadeh. They firstly introduced the Western approach to nephrology and urological surgery in Azerbaijan. This paper is devoted to activities and contributions of these physicians and researchers.

Mirkasimov Mir Asadullah Mir Alasgar oglu was born on November 17, 1863 in Baku. During his studies at the Medical Faculty of the Novorossiyssk (Odes- sa) University in Kiev. In 1926 he was sent to the surgical clinic in Germany to complete one of the sections of his work related with preparation and research of sections and cuts of the stones removed from the urinary organs. In 1927 M.A. Mirkasimov became the first Azerbaijani who defended doctoral thesis on the topic: “Materials for the study of urolithiasis in Azerbaijan”. This work has not lost its relevance even today.

Mirkasimov was one of the first authors of scientific papers and books in Azerbaijan on urology and nephrology, in the late 1920s. In 1929 – Professor, in 1945 – the member and the first President of the Academy of Sciences of the Azerbaijan Soviet Socialist Republic. He died on July 20, 1958 in, Mustafa bey Aga bey oglu Topchubashov also deeply contributed to development of urological surgery in Azerbaijan. This scholar was born in 1895 in Erivan (now, Yerevan in Armenia). In 1919, he graduated from the Kiev University and started to work at the Medical Department of the Baku State University. Professor Topchubashov was the author of numerous works in the field of urology, urological surgery neurosurgery, traumatology and anesthesiology. He was the Vice-President of the Azerbaijan National Academy of Sciences and the Honorary Chairman of the International Society of Urologists.

Another famous Azerbaijani urologist is Mir-Mammad Javad oglu Javad Zadeh. He was born on May 18, 1927 in Lankaran (Azerbaijan) and graduated from the 2nd Moscow Medical Institute named after N.I. Pirogov. In 1969, he founded a laboratory of the artificial kidney, and in 1971 he was the first in the Caucasus who performed a kidney transplant for the end-stage renal failure. Under the leadership of Prof. Javad Zadeh, for the first time in the Soviet Union, the method of autotransfusion during the surgery on urinary organs was applied. For this work, Prof. Javad Zadeh was awarded in 1986 with the Prize of the Council of Ministers of USSR. He is the author of more than 600 scientific works, including 33 monographs and textbooks, guidelines, patents and innovations including: “Surgery of the anomalies of the kidneys and ureter” (1978), “Handbook of Urology” (1978), “Chronic Renal Failure” (1978), “Surgery of kidney and ureteral anomalies” (1980), etc.

Therefore, we may conclude that starting from the beginning of the 20th century, the traditional methods of treatment of urinary diseases in Azerbaijan, which were based on many-century’s experience of Islamic or Greco-Armenian medicine, were supplemented and enriched with the progressive practice of the European scientific urology. As a result, a scientific school of urological surgery was created in Azerbaijan by such scholars as Prof. M.M. Mirkasimov, Prof. M.A. Topchubashov, and Prof. M. J. Javad Zadeh.

### NEPHROLOGY IN GEORGIA: FROM MEDIEVAL MEDICAL MANUSCRIPTS THROUGH THE EUROPEAN MEDICINE

**Ramaz Shengelia**

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In Georgian medical manuscripts, accounted since the VI century, description of the diseases, treatment methods and tools are mostly in line with the structure and conceptual basis, described in the Greco - Roman and Arabic sources of relevant period. The mentioned sources also to nephrologic (urologic) diseases that are mostly described in the Georgian Karabads of medieval - XIII-XV centuries. Certainly, a conceptual basis is the Theory of Humoral Pathology. It should be emphasized a diagnostic side of nephrological and urological diseases, where can be unambiguously said that very much is based on the original – own experience. The above-mentioned is particularly referred to the
inspection, where patient's position, posture, facial color and expression in the bed are of great importance. In addition, it should be noted that within the frames of treating aspect, after summing up the other authors' position - Geor-
gian author always gives own opinion that in it's side, taking into consideration the traditions of medical literature, raises a pretension of originality. At the same time - Georgian literature, that has been repeatedly mentioned before, was constantly exposed to the equal effects/fluences of the West and the East; consequently, it is very easy to observe some components of Indian and Chinese medicine in it as well.
Appearance of nephrology as a systemic discipline in Georgia (the Caucasus) is associated with the XIX century and Caucasian Medical Society (1864). At that time, translation from Western European languages into Russian and dissemination of relevant literature was carried out. For this period only literature of popular character but most important for the local population was translated into Geor-
gian language, as the language of conquered nation. Since 1918 (establishment of Georgian University) development of Georgian medical science with appropri-
ate modern terminology and original schools was started.

Michael Krügerholt
Emeritus Professor of Physiology and Clinical Physiology, Ophthalmologist, Department of Clinical Physiology, Charité, Universitätsmedizin Berlin - Germany

In 1962 K.-J. Ullrich accepted the newly created chair of the Department of Physi-
ology at Freie Universität Berlin (founded in 1948) only under the condition of having a co-chairman (O.H.Gauer). The new institute, located just opposite the famous Dahlem Museum, was finished in 1963. Berlin was in the centre of the Cold War (1961 Berlin Wall, 1962 Cuban Missile Crisis, 1963 President Kenne-
dy's visit to Berlin) and the political situation was very unstable. The student revolution started with protests against the war in Vietnam. The university offered Ullrich ideal working conditions: lots of space and enough money for expensive instruments, positions and grants to invite visitors from all over the world for lectures and short-time research projects. The initial money for equipment could be stretched over a period of 5 years. In addition to three senior scientists (Gertz, Hierholzer, and the neurophysiologist Grüsser), Ullrich raised funds for positions to attract a large, strong group of young postdocs, some of them first-class researchers. Ullrich was a supportive family at the Berlin institute was competitive and hard working in a general coop-
terative atmosphere. This productive family was created by Ullrich's enthusiasm for epithelial transport. The research family at the Berlin institute was competitive and hard working in a general coop-
terative atmosphere. This productive family was created by Ullrich, our supportive and kind paternal friend.

In 1967 Ulrich was elected director of the Max-Planck Institute of Biophysics in Frankfurt/Main. In 1994 he was made an Honorary Doctor of the Medical Faculty of Freie Universität Berlin.

KARL VON ROKITANSKI: CONTRIBUTION OF A FAMOUS PATHOLOGIST BORN IN BOHEMIA TO NEPHROLOGY
Sylvie Opatma
Professor, Department of Medicine I in Charles University Medical School, Plsen - Czech Republic

Karel Frehver von Rokitanski, born February 19,1804, Hradec Kralove (Konigratz), Bohemia, Austrian Empire (now Czech Republic), died July 23, 1878, Wien. K. von Rokitanski studied medicine in Charles University in Prague and in Vienna where he graduated in 1828. Rokitanski started his professional career as a pathologist in Vienna General Hospital becoming the best descriptive pathologist of his days. Figures of au-
topies performed by him or by an assistant directed by him differ from 30 000 to about 100 000 but are no doubt extremely high. Based on this experience he published the Handbook of Pathologic Anotomy (1842) which helped to establish pathology as a recognized science. He became ordinarius in this discipline in 1844 in Vienna Medical School and the same year pathology had been made an

obligate object of teaching. His contribution to the field of nephrology is represented by the fact that he differentiated Bright's disease from amyloid degeneration of the kidney and de-
scription of polyarteritis nodosa. Later on (1849) he became dean of the medical faculty in Vienna and rector of the university in 1853. He was then elected President of the Imperial Academy of Sciences and was a distinguished Vienna personality. He was also awarded honorary doctorate by Charles University. Despite the fact that Rokitanski spent all his professional life in Vienna he never forgott his Czech origins, spoke Czech and supported his Czech friends and their patriotic activities. He financially contributed to the construction of the Czech National Theatre in Prague. He was in touch with the Czech Academic Association represented e.g. by T.G. Masaryk who in 1918 became the first president of newly established Czechoslovakia.

THE EPIDEMIOLOGY OF KIDNEY CONDITIONS IN ANTiquity AND BYZANTIUM
Alain Touwaide
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Historical research on ancient medical conditions is a delicate topic. Retro-
spective diagnosis (differential or not) is controversial and physical evidence (epigraphy, epigraphpathy) is rare. On this basis, epidemiological (quantitative) approach seems impossible. A dif-
f erent approach to quantitative evaluation of diseases among ancient popul-
ations seems possible by using indications of therapeutic agents as bio-markers making it possible to trace the presence of a pathology. On the basis of this hypothesis, we can propose an epidemiological approach which will be applied here to kidney conditions in Antiquity and Byzantium.

SYMPTOMS AND SIGNS THROUGH THE AGES: PHYSICIANS OF THE PAST AND FUTURE THINKING ALIKE
Pavlos Goudas
IATOS Dialysis Unit, Amalias - Greece

The greatest step in the evolution of medical science was probably the appli-
cation of logic and reasoning in the understanding of diseases, something that occurred primarily during the Hippocratic era. Despite the fact that medicine has evolved enormously from the 5th c BC to our days, there are some symptoms and signs that not only were they observed by physicians through the ages, but also they still have the same interpretation as they had in antiquity. It is such similari-
ties that show the resemblances in the reasoning of physicians through history. A physician of the 4th c. BC had the same way of thinking as any physician of our era. If they had the same means and knowledge they would also share the same effectiveness in diagnosis and treatment with their modern colleagues. In this small work I will try to show these resemblances for symptoms and signs that were related to diseases of the kidneys, like patterns of pain, skin problems, patterns of pulse, symptoms from urination and signs from urine. In all the condi-
tions described the ancient passages will be compared to modern ones taken from contemporary books or other sources on physical examination. It is interesting that not only were the symptoms and signs described in exactly the same manner as they are today, but in some cases even the diagnoses given then would be correct if examined by modern means, despite the lack of tech-
nological support in those eras. Some of the most characteristic of these signs and symptoms are types of edema, patterns of pain during micturition, changes in urine colour etc. The conclusion that physicians of the past think in a similar manner with modern physicians, comes effortlessly.

THE LOOP OF HENLE AS THE MILESTONE OF MAMMALIAN KIDNEY CONCENTRATING ABILITY: A HISTORICAL REVIEW
Efstathios Koulouridis1, Ioannis Koulouridis2
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Introduction: After mammals migration from the water to terrestrial life and in order to survive in the new environment they had to develop an excretory organ with the capacity of independently conserve water and sodium. This organ was the kidney. The fundamental structure of urine concentration in mammalian kid-
ney is the “U” shaped loop of Henle.
Purpose: To unravel the quest of our knowledge concerning the understand-
ing of urine concentrating mechanism and the time gap between description of
The description of the various inherited diseases, where we detect many molecular genetics. The marks of the foreign visitors-conquerors emerge through did not prevent the development of social and sexual relationships, to the extent many centuries and till today, by the majority of the Cypriot population. However, an event that resulted in the adoption and conservation of the Greek identity for Achaean Greeks had massively colonized the island since the ancient times, an influenced significantly in its cultural development and its genetic make up. The many interested parties, while she has been conquered and exploited consecu-

During its long history Cyprus has repeatedly become the apple of discord for peoples of the Levant. Cyprus is the third largest island in the Medi-

From the sea floor 90-92 million years ago, owing to under-sea volcano eruptions the loop of Henle was described by Lorenzo Bellini in 1662 who attributed the discovery to the renal tubule and introduced the "excretory theory" in the experimental investigation of renal function and showed that Ludwig's theory was quite right. Homer Smith in 1932 introduced the renal clearance of inulin and measured the glomerular filtration rate and the fractional excretion of various solutes from the kidney. After that researcher's interest monopolized the investigation of filtration, absorption and excretion of various solutes and substances by the kidney and Henle's discovery remained again dormant. In 1942 Werner Kuhn, a physical chemist in Basel University, proposed that the loop of Henle may be the natural analog of the hairpin countercurrent multiplication system which concentrates urine in mammalian kidney. In 1951 Werner Kuhn, Bart Hargitay and Heinrich Witz showed experimentally that the loop of Henle was the most important part of the countercurrent multiplication system of urine concentrating mechanism in mammalian kidney. The new theory has not accepted by English speaking scientists neither Homer Smith until Carl Gottschalk and Margaret Myile in 1958 published their experimental work which proved the correctness of Kuhn's theory. After that the new theory was accepted by Homer Smith who established its validity in an excellent lecture delivered on October 17, 1958 at the Annual Postgraduate Week organized by the New York Academy of Medicine. Gottschalk summarized the evidence of the accumulated knowledge upon the countercurrent hypothesis in a lecture presented in "The Harvey Lectures" in 1962 three centuries after description of collective ducts and one century after description of the loop of Henle.

Conclusion: The evolution of our basic knowledge upon anatomy and functional properties of the nephron lasted almost three centuries. The reasons for this delay were the lack of proper knowledge, the lack of proper instrumentation for experimental investigation and the limited spread of knowledge during the previous centuries.

Molecular Genetics and Nephro Genetics Studies Support Historical Phylogeographic Evidence about the Origin of the Population in Cyprus

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The island of Cyprus at the north-eastern corner of the Mediterranean basin, arose from the sea floor 90-92 million years ago, owing to under-sea volcano activity. Consequently, the first inhabitants of Cyprus must have been people from neighboring lands while there is genetic evidence for close relationship with peoples of the Levant. Cyprus is the third largest island in the Mediterranean; after Sicily and Sardinia, with a population of about 838,897, of whom 659,350 (78 %) belong to the Greek-Cypriot community, 87,600 (11%) to the Turkish Cypriot community and 66,000 (8.3 %) are foreigners residing in Cyprus.

During its long history Cyprus has repeatedly become the apple of discord for many interested parties, while she has been conquered and exploited consecutively by the superpowers. It was inevitable for its population, therefore, to be influenced significantly in its cultural development and its genetic make up. The Achaean Greeks had massively colonized the island since the ancient times, an event that resulted in the adoption and conservation of the Greek identity for many centuries and till today, by the majority of the Cypriot population. However, the relationship between the conquered Cypriots and the successive conquerors, did not prevent the development of social and sexual relationships, to the extent that this becomes conspicuous through research of contemporary human molecular genetics. The marks of the foreign visitors-conquerors emerge through the description of the various inherited diseases, where we detect many common genetic characteristics. Usually these characteristics become more evident when accompanied by some pathology, thereby making it evident that some of the conquerors or visitors left behind not only their castles and cultures but also their genes. There are many examples of genetic defects that nearly pin-point the previous colonizations or visits and effects of close and distant neighbors. Such examples include mutations for monogenic kidney disorders, while some strong founder effects of renal gene mutations trace parts of the past history of the Cypriot population. Especially worth noting is a pathogenic mutation in the COL4A3 gene, G1334E, which was detected in 169 patients of 15 families with thin basement membrane nephropathy, while another mutation in the CFHR5 gene was found in 136 pa-

FROM IATROSOPHIA TO PRINTED BOOKS

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Kidney diseases in post-Byzantine medical manuscripts. A series of post-Byzantine medical manuscripts, dating from the 17th to the early 19th century, record formulas relating to kidney diseases. This communication attempts to compare the formulas among themselves, to explore their relationship with previous medical treatises of the classical and Byzantine periods and the influences therein by medieval Eastern and Western medical textbooks, from a literary and historical perspective.

The Transfer of Medical Knowledge from Central Europe to Greece During the Enlightenment

Constantina Triga
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The Enlightenment is an intellectual movement of the eighteenth century, associated with rationality and the search for evidence, which inspired the French Revolution. The Greek Enlightenment is an ideological movement that attempted to convey the ideas of the European Enlightenment to the occupied nation, which was mainly supported by Greeks living in central European countries, who adhered to the ideas of the Iluminati; however, most Greeks remained faithful to traditions and the eastern way of thinking. This context in which medical knowledge was conveyed was from central European countries to Greece. Medicine becomes closely linked to natural sciences, frees itself of theocratic beliefs and starts to be based on scientific criteria. Greeks living in central Europe at that time translated European texts or composed their own, transferring modern medical knowledge in order to disseminate it to a larger percentage of people.

Modern medical texts first appear in Greek books in 1745. The medical knowledge disseminated in Greece during the Greek Enlightenment appears in three categories of texts: A) purely medical books, B) various other books and C) pre-revolutionary magazines, especially in "Hermes the scholar" [Ermis o logios]. During the 1745-1821 period, there is an increase in the number of books published by physicians. The literature contained in medical texts at that time was the contemporary European literature. The average temporal interval between the European publication and the corresponding Greek translation was 6.6 years, suggesting that scientific medical knowledge was transferred rapidly to the Greek territory.

Medical knowledge was also conveyed through non-medical books (physics, philosop-

Nephrology in Mexico. Its Early References and Knowledge of Classical Nephrological Texts

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The origin of nephrology as a modern medical knowledge comes only from the
1830s, but the early data on renal diseases come from the middle XVII century and some relations between urinary problems and renal alteration are recorded in the scarce prehispanic medical texts. Pain in the lumbar regions appears in the scarce prehispanic medical texts. In the in the National Institute of Nutrition and the Hospital Infantil de México were established services of nephrology. The first references of diabetes in modern era, very little is known about its history since antiquity. In this review, the historic course of diabetes and its complications, suggested interpretation and treatment strategies. Over the last three decades, renal diseases have become a major public health problem and the role they play in the formation of Mexican Nephrologists.

DIABETES MELLITUS; A REVIVAL OF THE PAST AND A PERSPECTIVE FOR THE FUTURE
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Diabetes mellitus is considered one of the most catastrophic diseases of our times and a cause of considerable morbidity and mortality worldwide. Its presence is accompanied by an increased incidence of cardiovascular and renal disease, metabolic syndrome, amputations, and blindness. Current management of diabetes requires laborious lifestyle efforts and longstanding medical attendance on behalf of the patients, as well as continuous search for new medicines and interventional treatments, all of which bear a considerable burden on patients as well as public health systems. In spite of the tremendous impact of diabetes in modern era, very little is known about its history since antiquity. More specifically, few are aware that diabetes mellitus is an ancient disease that has accompanied mankind until today. The first references of diabetes were recorded over 3,500 years ago by the Egyptians. Ancient Greeks, Romans, Hindus and Persians have provided vivid descriptions of the disease and its complications, suggested interpretation and treatment strategies. Over time, some of the greatest medical doctors worldwide dedicated their lives to management of diabetic patients and pioneered in the first scientific attempts and experiments on diabetes. In this review, the historic course of diabetes mellitus from antiquity throughout the centuries is presented, starting from the origin of its name.

Some of the most common perceptions as well as misconceptions about the etiology and pathogenesis of diabetes are discussed. Diagnostic methods and early efforts on therapeutic management of diabetic nephropathy are analyzed. Moreover, prunal experimental studies on diabetes are examined in the context of contemporary scientific knowledge and sociopolitical status. The spirited discussions, the views offered by our ancestors through urine and the concomitant lesions are discussed in 1868. The start of nephrology as a definite medical specialty comes only in the 1920s, when at the Medical School of Salerno is created the first specialized service with Aquilino López de Hinojosa (1578) and Farfán (1579) books, and in 1608, Juan de Barrios in the National Institute of Nutrition and the Hospital Infantil de México were established services of nephrology. The first references of diabetes in modern era, very little is known about its history since antiquity. In this review, the historic course of diabetes and its complications, suggested interpretation and treatment strategies. Over the last three decades, renal diseases have become a major public health problem and the role they play in the formation of Mexican Nephrologists.

RESULTS:
1) Hippocrates, despite his impressive clinical observations, knew little about anatomy and physiology of urinary system. He failed to realize that urine is produced in the kidneys and he believed that the bladder is the place of this function.
2) Aristotle, in his work “Historia Animalum”, provides an accurate description of the urinary system. However, he believed that the kidneys were not of actual necessity, but as matters of greater finesse and perfection, and he claimed that their role was to produce sperm rather than urine, the latter probably formed in the bladder. He also claimed that calculi occurred only in humans, as a result of humors passing down from the kidneys.
3) Galen, who proved undoubtedly that the urine, is produced in the kidneys; pass through the ureters to the bladder where an ureterocystic valve exists to avoid reflux, still believed that the right kidney is higher than the left one in order to receive the blood directly from the liver for quick purification.

Conclusions: From the above few examples, it is evident that great minds were still doing great mistakes, unavoidable in the scientific level of their era. By covering these, and others mistakes that will be discussed in the full paper, either out of national pride or out of a tendency to beauty the past, we only weaken our support to their great achievements.

FOAM IN URINE: FROM HIPPOCRATES TO THE MEDICAL SCHOOL OF SALERNO
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The formation of persistent little bubbles in urine, similar to those of beer, were noticed since ancient times by the first scholars of uroscopy. The diagnostic interest, rare and uncertain in Hippocrates, has increased with the time. The Hippocratic school limited itself to observing the sign without interpreting the pathophysiology of the disease, in order to compare it with other clinical signs; Hippocratic texts only expressed an opinion on the severity and prognosis of the pathology which had produced it. Galen does not differ much from the Hippocratic school, however, he tries to interpret the cause of the formation of bubbles in urine. Certainly, being the urine still fluid unknown to him and therefore, about the superficial tension of liquids, he believes that the air contained in the bubbles of the foam in the urine comes from within the organism. However, he realizes that the foam in urine is formed only when it is denser (more viscous). The foam in urine is not always a sign of something wrong. From ancient times till today the status of health is often evaluated by urine analysis. This issue is not referred to urine as an indicator of disease but as a cure
of human diseases (urine therapy). Urine therapy refers to a various applications of urine for medical or cosmetic purposes, including drinking of one’s own urine. Historical Retrospection: Urine therapy has been practiced for thousands years. It has been known throughout centuries both in the West and in the East. The Ebers Papyrus of the 1500 BC one of the oldest surviving Egyptian text document, a Sanskrit text called “Damar Tantra” include teaching to drink urine for health. In Buddhist tradition medical monks drink urine as an ancient yoga practice to promote meditation. Medical traditions in many cultures like Ayurvedic in India, Chinese medicine, Native American medicine were also promoters of urine therapy. In Byzantine and Islamic Medicine urinotherapy, the use of camel urine specially, was a common remedy. Even today, although in the absence of sufficient scientific evidence is claimed by many practitioners as beneficial for health. The first question that probably arises from the opponents of the urine therapy is how a waste product could be beneficial for health. Controversially the promoters claim that urine is equal as any other body fluid and additionally has a wide scale medical properties (antiviral, antibacterial, immune stabilizing, antineoplastic etc).

Purpose: The aim of this issue is not to convince of the orthodox or not of urine therapy. We will discuss about the traditional local cultural, religious, ethical influences in medical practice, throughout the history of medicine, even though for many of them there is no scientific basis at all.

Epilogue: Medicine as any other science can not be separated of these influences as we walk on. We continue to follow the ancient texts of our religious faiths, local cultures and traditions or other spiritual practices. These influences are as “diachronic” as diachronic is the the human motive to find out the “secret” formula to wealth, happiness and health always ending to leave us the “bitter taste” of wanting more.

LEECH THERAPY AND KIDNEY DISEASES FROM THE PAST TO MODERN MEDICAL RESEARCH
Evanthia Perikleous, Manthoula Kazamia, Polyrini Vourlotti, Despina Missiou, Manthos Dardamianis
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Phlebotomy, or bloodletting, is the longest-running tradition in medicine. It originated in the ancient civilizations of Egypt and Greece, persisted through the Medieval, Renaissance, and Enlightenment period, flourished in Arabic and Indian medicine, and lasted through the second Industrial Revolution. The practice continued for 2,500 years until it was replaced by the techniques of modern medicine.

Several thousand years ago, whether you were an Egyptian with a migraine or a feverish Greek, chances are your doctor would try one first-line treatment before all others: bloodletting. He or she would open a vein with a lancet or sharpened piece of wood, causing blood to flow out and into a waiting receptacle. If you got lucky, leeches might perform the gruesome task in place of crude instruments. In our district of Greece, in the prefecture of Epirus leeches were used until the middle of the last century. After research we established that these methods had stopped and one found it difficult to find the traditional leeches even though they would definitely be found in the marshes. The most well known leech marshes in the area are marked on the google map. Leeches were used for every ailment, headache, hypertension and strokes. It was the main therapy immediately after a stroke and paralysis, but also as a precaution in cases of headaches with cerebrovascular accidents. In 1943, William Kolf, a young physician from The Netherlands, developed a “rotating drum kidney” with a larger filter surface area made of cellophane membrane. The first patient he dialyzed was a 29-year-old housemaid with CKD. She received 12 dialysis treatments, but the therapy was stopped because of a lack of access sites, since placing each cannula required a cut down to the artery. In 1960, Dr Belding Scribner and engineer Wayne Quinton developed an in-dwelling arteriovenous shunt at the University of Washington. The Teflon shunt was an early example of an implanted medical device that is partly internal and partly external. In 1961, Shaldon, unable to find a surgeon to place the necessary dialysis cannulae, inserted catheters into the femoral artery and vein with the Seldinger-technique. Drs Brescia and Cimino later pioneered the arteriovenous fistula in the United States of America. The evolution of imaging has had a major impact on the diagnosis and treatment of renal failure such as high blood pressure, headache, back pain, abdominal pain, fatigue, anaemia, poor appetite and oedema.

THE HISTORY OF HEMODIALYSIS VASCULAR ACCESS
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Vascular access has been used medically for centuries. The circulatory system was first described in 1616 by Harvey. In 1896 Jabezou and Briau published an experimental technique in dogs which consisted of suturing an artery-end to-end-anastomosis. A few years later, Alexis Carrel introduced the three-point end-to-end- and a side-to-side-anastomosis. In October 1924, Georg Haas performed the first hemodialysis treatment using a glass cannulae which obtained arterial blood from the radial artery and returned it to the cubital vein. In 1943, Willel Kolff, a young physician from The Netherlands, developed a “rotating drum kidney” with a larger filter surface area made of cellophane membrane. The first patient he dialyzed was a 29-year-old housemaid with CKD. She received 12 dialysis treatments, but the therapy was stopped because of a lack of access sites, since placing each cannula required a cut down to the artery. In 1960, Dr Belding Scribner and engineer Wayne Quinton developed an in-dwelling arteriovenous shunt at the University of Washington. The Teflon shunt was an early example of an implanted medical device that is partly internal and partly external. In 1961, Shaldon, unable to find a surgeon to place the necessary dialysis cannulae, inserted catheters into the femoral artery and vein with the Seldinger-technique. Drs Brescia and Cimino later pioneered the arteriovenous fistula in the United States of America. The evolution of imaging has had a major impact on the diagnosis and treatment of renal failure such as high blood pressure, headache, back pain, abdominal pain, fatigue, anaemia, poor appetite and oedema. The first was that blood was created and then used up, it did not circulate and so it could ‘stagnate’ in the extremities. The second was that humoral balance was the basis of illness or health, the four humours being blood, phlegm, black bile, and yellow bile, relating to the four Greek classical elements of air, water, earth and fire. Even after the humoral system fell into disuse, the practice was continued by surgeons and barber-surgeons. Bloodletting is said to be general when blood is taken from a vein or artery. It is termed local when, by means of leeches, cupping, or scarification, blood is taken in smaller quantities, with a view of relieving limited congestion and vascular tension. In our district of Greece, in the prefecture of Epirus, dry cupping was almost always used for treating colds and coughs while wet cupping was added as a further treatment for patients with oedema and breathlessness. The tradition of dry cupping was known to all especially housewives. For wet cupping special knowledge was required. It was carried out by barbers. We present a one hundred and fifty year old barber shop photograph from Preveza, in which three surgeons-barter have applied the same therapy. This was practiced until 40 years ago with a six blade scarificator. These surgeons-barbar used a nineteenth century scarificator shown in our photograph. According to the severity of the condition, the cuts were deeper. Those who did not have a scarificator used a razor in the same way.

THE EVOLUTION OF IMAGING IN NEPHROLOGY
Despoina Spyroupolou, Ekaterini Spilopoulos, Dimitris Kardamakis
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The evolution of imaging has had a major impact on the diagnosis and treatment of renal diseases. Two major turning points are recognized as important in the management of these diseases: the discovery of X-rays by Roentgen in 1895 and the application of ultrasound technology for body imaging by John Julian Cuttance Wild in the 1950s. Early developments included plain films of the abdomen, retrograde urographic techniques, development of contrast media, extracorporeal urography, renal mass biopsy, angiography, cystography and nuclear medicine procedures.

These procedures led to the maturation of the specialties of diagnostic radiology and urology, and the development of subspecialties such as pediatric urology and interventional radiology. Ultrasound and computed tomography and magnetic resonance imaging are increasingly applied in urological evaluation, treatment and surveillance. It is the responsibility of all physicians to assess the advantages of new developments while weighing those advantages against the additional radiation exposure and the costs associated with new procedures.
HISTORY OF ALGERIAN NEPHROLOGY

Tahar Rayane
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The nephrology was born in Algeria in 1973. This naissance coincides with the first hemodialysis sessions performed by Dr. CALONNA in the medical department of Mustapha hospital in Algiers. Directed by Professor MESSERCHMIT. One year later, the treatment of acute renal failure was started in El Kettar Hospital by doctors: Pr. M. DRIF, Dr. Daoud, Dr. M.BENALI. In 1975, Dr. AOUHIA and Dr. BASTA began the first training of Nephrology in Medical Graduation. In 1978, the Chronic Renal Failure (CRF) was treated in the first hemodialysis center in Mustapha University Hospital's (ALGIERS). This activity coincided with the come back of the first Nephrologists trained in France (Pr Benabadji, Pr. Laradi, Pr BOUKARI).

In 1979, the treatment of Chronic Renal Failure by Continuous Ambulatory Peritoneal dialysis (CAPD) is introduced at University Hospital of Beni Messous by Dr. Bouayed and Dr. A. KROURI. This technique was proposed to the patients of CHU Mustapha by Dr. AIT SLIMANE. The first renal transplant was performed in June 14, 1986 by Prof. BENOT (PAUL Brousse Hospital, PARIS) in collaboration with Algerian Team (D. MOHAMEDi, M. OUZIALA, A. MEROUANI and T. RAYANE).

In 1987, Professor MARCEL LEGRAEN of the PITIE SALPETRIERE Hospital, introduces an CRF integrated system care, and helps the Algerian Nephrologist Team. He stayed two years in Algeria. The start of teaching the specialty of Nephrology in Post Graduation began in 1989, and since then - Algeria has trained over 300 Néphrologistes practicing in 270 Dialysis centers and 14 University Hospitals.

DINING AND WINING IN ANCIENT GREECE: THE SYMPOSIA

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"Ὅτι ὁ Θεόπομπος ὁ Χῖος τὴν ἄμπελον ἱστορεῖ εὑρεθῆναι ἐν Ὀλυμπίᾳ παρὰ τῶν Ἀλφειόν· καὶ ὅτι τῆς Ἑλείας τόπος ἐστὶν άπέχων όκτώ στάδια, ἐν ᾧ οἱ ἐγχώριοι κατακλείοντες τοῖς Διονυσίοις χαλκοῦς λέβητας τρεῖς κενοὺς παρόντων τῶν ἐπιδημούντων ἀποσφραγίζονται καὶ ὑστερον νοίγοντες εὑρίσκουσιν οἴνου πεπληρωμένους."

Theopompos of Chios relates that the vine was discovered in Olympia, on the banks of the Alpheus; and that there is a district in Elis a mile away, in which, at the Festival of Dionysus, the inhabitants shut up and seal three empty cauldrons in the presence of visitors; later they open the cauldrons and find them full of wine. Athenaeus. Deipnosophistae, i 33-34. Loeb Classical Library. Vol 1 pp. 148-49 Translated by C.B. Gullick.

Dining and Wining in Ancient Greece encompasses diets and drinking habits over a period of at least 13 centuries, from the siege of Troy to the 2nd century AD, the time when Athenaeus of Naucratis, an Egyptian Hellen, wrote about the food and wines of Greek antiquity.

The landscape of this survey includes not only metropolitan Greece and her islands but also the entire Mediterranean basin, the Black Sea, the Arab peninsula, and Asia as far south as India; areas which the Greeks colonised, visited or conquered. During this period and within this vast geographical area produce, dietary habits and custom were inevitably diverse and varied.

But before discussing the hors d’oeuvres, and before considering whether the Ancient Greeks enjoyed champagne with caviar, we shall be reminded of a very special banquet which may have influenced the course of history.

And our gastronomic journey will conclude with a famous symposium in which Dr. Eryximachus examines the question of desire and gives sound advice on hiccupps.