

Historical Exhibition Brochure

DUTCH CONTRIBUTIONS TO UROLOGY



EAU
History
Office

NEDERLANDSE
VERENIGING
VOOR UROLOGIE

Presented on the occasion of the 37th Annual EAU Congress

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As in many countries in Western Europe, until the end of the 19th century urological problems in the Netherlands were treated by medical professionals with different levels of education or interests. Surgery was performed in the early days by traveling barber surgeons, often belonging to one family who trained their successors in the “cutting of the (bladder) stone”. Non-surgical treatment was managed by apothecaries or physicians, sometimes educated at a medical school (a university in the Netherlands or abroad), mainly with natural local herbal products.

A special, world-famous Dutch medicine used and prescribed for urinary stone disease and urinary infections was called “Haarlemmer Olie”(Haarlem Oil), a mixture of turpentine oil (from pine trees), sulphur and herbs. This medication was used all over the world for more than 300 years and is still produced in Haarlem, a town 20 kilometres west of Amsterdam.



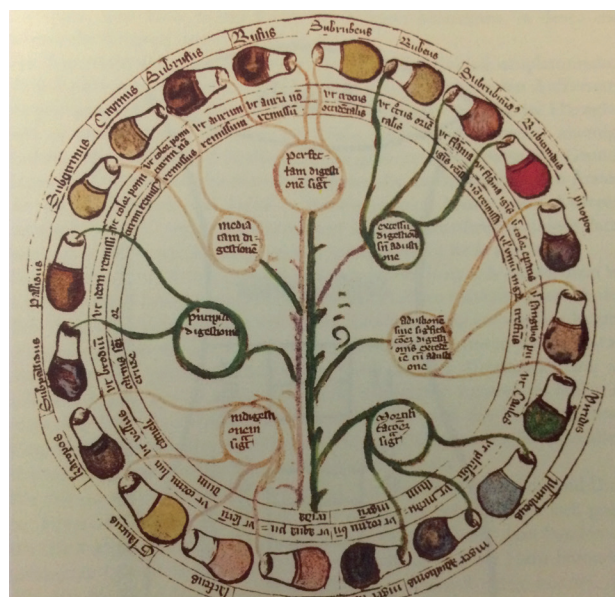
An example of Tilly Haarlem Oil.

Photo by Lise Koning - geschiedenislokaal023.nl/

<https://commons.wikimedia.org/w/index.php?curid=65650953>

Uroscopy

Uroscopy was one of the urological skills that belonged to the medical profession. It was based on the “four humors” theory of Galen, a doctor living around the second century AD in the Roman Empire. If one of the four “humors” was misbalanced, illnesses would occur. Between the 9th and 11th centuries, a scheme was developed to investigate urine in a urine glass, called a matula.



An example of a uroscopy wheel, with different ailments assigned different colours of urine.

The matula is probably the oldest, and first, urologic diagnostic instrument; it was still in use until the 19th century. The house of a “medical professional” could often be recognised by the sign of a matula hanging outside the front door. By the mid-19th century, when other chemical analyses could be done on urine and were more accurate, uroscopy was abandoned by urologists. From that time on uroscopy was only done by quacks, a practice that continues even to this day.

Already in the 17th and 18th century many “healers” who were not educated at a medical school were charged with fraud and depicted on paintings of the Golden Age. The cover of this brochure shows a doctor and a love-sick woman, a beloved theme in the 17th century, painted by the Dutch artist Richard Brakenburgh (1650 - 1702) in 1697. This painting belonged to the collection of books and instruments of the late Dutch paediatric urologist Jos De Vries (1944 - 1996) and was acquired by the EAU History Office several years ago.

In the same period a “doctor” would be depicted as a cheat who asked money for his advice based on fantasy. This can be seen in *De Piskijker* (“the uroscopist”, literally, “the piss looker”) c.1663 by well-known Dutch artist Jan Steen (1626-1679). He depicts a doctor, who could not even put his own shoes on properly (they are switched) and who was visiting a clearly visible pregnant woman, examining her urine in a matula.

The two matulas on display at the Historical Exhibition were found in archeologic excavations during the development of the Amsterdam metro system over the past fifty years. One is in a very sound condition and is probably 300 years old. It was found in 1974 near the *Nieuwmarkt* (“new market”) with its impressive old *Waag* or weighing house. A significant number of the houses in this antique old town and early harbour were torn down for the building of the east line of the metro, which led to many violent protests of students and local inhabitants.

The other matula was found in the muddy soil when the North-South metro line was built in the first decades of the 21st century. The RAI congress centre is connected to the North-South metro line via the Europaplein station. If you disembark at Rokin station, further North, you can find display cases accompanying the escalators, featuring almost 10,000 items that were found during the dig through Amsterdam’s oldest neighbourhoods.



De Piskijker by Jan Steen. On display at Museum De Lakenhal in Leiden (NL).



The pristine “Nieuwmarkt matula” that was found in 1974, probably from the 17th century. (EAU Historical Collection, courtesy Erik Felderhof)

Dutch Masters

In the Dutch Golden Age, many paintings of famous Dutch and Flemish artists showed medical professionals. Everybody will recognise Rembrandt van Rijn's (1606-1669) painting "The Anatomy Lesson of Dr. Nicolaes Tulp" (1632). This painting was made in the attic of the aforementioned weighing house on the Nieuwmarkt, and depicts the dissection of the body of a criminal who just had been executed. These anatomical lessons were performed by a surgeon every month at that time and were open to the public. Rembrandt also made several sketches of everyday life, including urinating figures (1631).



Left: *The Anatomy Lesson of Dr. Nicolaes Tulp* by Rembrandt van Rijn. On display at the Mauritshuis in The Hague (NL).

Below: *Pissing Man and Pissing Woman*, again by Rembrandt. From the collections of the Rembrandthuis in Amsterdam (NL).



The advent of urology

Following the invention of anaesthesia in the late 1800s, surgeons could start performing what would have previously been unbearably painful investigations and operations on patients. Qualified urogenital surgeons performed cystoscopy and even large open operations such as radical prostatectomies around 1900. In the USA, Hugh Hampton Young (1870 - 1945) described his perineal radical prostatectomy, illustrated by his personal draftsman, William Didusch in 1905.

Towards the end of the 19th century and in the early 20th century, the first urological associations were started in several western countries, founded by urogenital surgeons, sometimes together with other medical specialists. In Holland, two surgeons interested in genito-urology, Hido Jan Brongersma (1869 - 1945) and R.Rochelle, together with two dermatovenereal specialists, a pathologist and a general practitioner founded the Dutch Urological Association (Nederlandse Vereniging voor Urologie or NVU) in March 1908. Brongersma was the first president of this society until he left Holland in 1926.

During this period, office urology was mostly performed by a dermatologist specialised in venereal diseases and some surgeons working in large (university) hospitals. These surgeons also held outpatient clinics, practising in private houses.

Education and training was done to become a general surgeon and surgical urology was a part of this specialty until the Second World War. In between the two world wars only a few doctors participated the activities of the NVU.

Following the Second World War, urology in the Netherlands welcomed a cascade of new inventions like endoscopic instruments as well as new medications (antibiotics, painkillers like spasmolytics, etc.). An official training programme for urology was started at different universities and large (peripheral) teaching hospitals. After a graduation in general surgery some surgeons sub-specialized in urology. Dr. Wim Moonen (1919-1997), a general surgeon who trained in Urology in Belgium, France and USA, became the first Professor of Urology at the Radboud University hospital (Nijmegen) in 1965. Many other Dutch university hospitals followed this process and training for urology was performed in a combination of a large peripheral hospitals with a university hospital.

In the early 1950s, Dr. H. Vlietstra (1917-1996), urologist in Rotterdam, was well known for his innovative operating techniques and his self-produced (endoscopic) devices, which were in some cases improvements or variations of existing endoscopic instruments.



The Vlietstra resectoscope, built to his design in 1954. The resectoscope has special controls that allow the tip to flip back and reach bladder tumours that would otherwise be difficult to treat. (Courtesy of Wouter Blitz)

Donker and Walsh

At the University Clinic in Leiden, Professor Pieter Donker (1914-1999) ran an experimental and anatomical laboratory and was especially interested in the (micro-)anatomy of the intrapelvic organs. During a visit to the AUA in Baltimore, Donker and his wife met Dr. Patrick Walsh (1938-) of Johns Hopkins, who also was investigating the blood supply and innervation of the cavernous corpora. In a discussion over dinner, Walsh found out that Pieter Donker had the same interest and Donker invited him to Leiden and showed him his work at the anatomical lab. As a host, Donker wanted to show Walsh around Leiden, but Walsh was more interested in working at the lab, Donker and Walsh dissected the body of a stillborn boy to explore the anatomy of the small pelvis.

At that time, radical prostatectomy was not frequently performed for the radical treatment of prostate cancer because the postoperative complications of impotence and urinary incontinence. Mostly, men were treated by external radiotherapy. Walsh wanted to improve the operation technique by saving the innervation and sphincter muscle. Based on these discussions, Patrick Walsh became world-famous with his first nerve-sparing radical prostatectomy. Even after 25 years the first patient kept his potency and was fully continent.

The sketches and illustrations displayed in the History Office exhibit were found after the retirement of Donker, when the attic of the former urology department had to be cleaned before the destruction of the building took place.



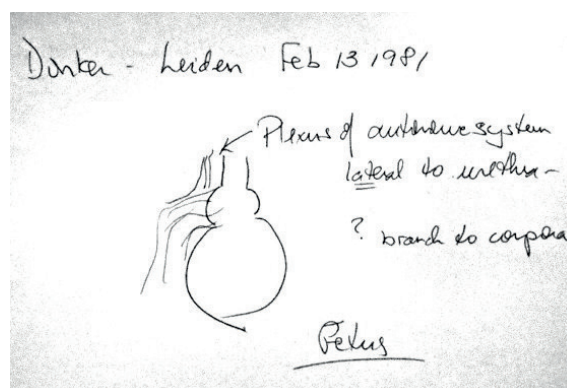
Pieter Donker (1914-1999)
(Obituary, *Nederlands Tijdschrift voor Geneeskunde*)



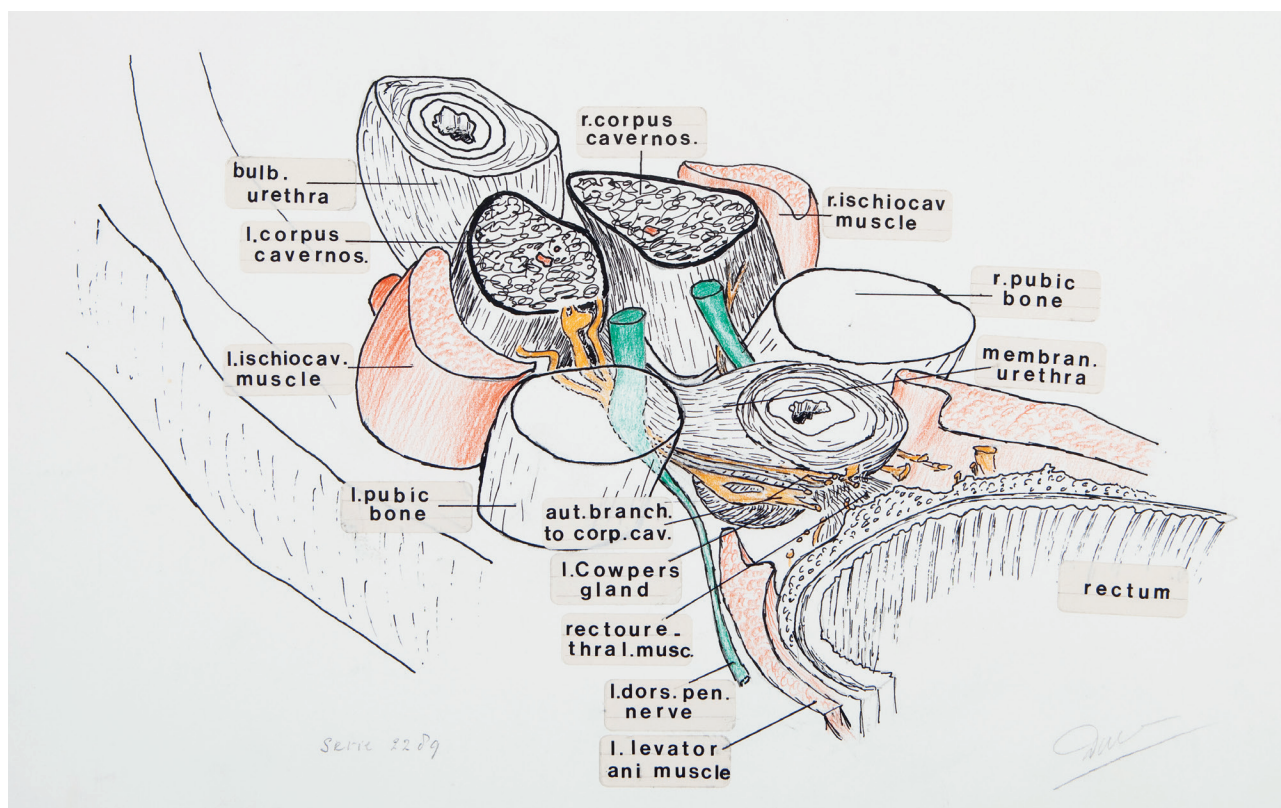
Patrick Walsh (1938-)
(Portrait from Johns Hopkins website)



"Impotence following radical prostatectomy: Insight into etiology and prevention" by Walsh and Donker. *Journal of Urology* Vol. 182, (1982)



Original schematic drawing of pelvic autonomic nerves in a male stillborn infant drafted by Patrick Walsh in the basement of anatomy building in Leiden when he worked together with Pieter Donker on 13 February, 1981. (*Europe: The Cradle of Urology* (2010))



One of the illustrations that was originally featured (in black and white) in the seminal 1982 article in the *Journal of Urology* by Walsh and Donker. (Photo courtesy of Rob Pelger)

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European
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The EAU History Office at EAU22

EAU History Office Specialty Session:

Dutch Contributions to Urology & Anniversaries

Saturday, July 2, 11:00-13:30

Grey Area, Room G107

Abstract Session 27:

History of Urology Pearls

Sunday, July 3, 10:30-12:00

Grey Area, Room Emerald

New books at EAU22

Free for EAU Members with the appropriate entitlements, while stocks last:

- *Roma Intima: Love, Lust and the Human Body* by Johan Mattelaer and Bert Gevaert
- *De Historia Urologiae Europaeae Vols. 27, 28 and 29*

Collect your copies at the EAU Booth in the Exhibition. There will be an introductory lecture at the Specialty Session, followed by a **book signing** at the EAU Booth on Saturday, from 13:30 to 15:00. Don't miss your chance to get your copy signed by the authors!



Back on sale at a discounted price!

The following four books will be for sale at the EAU Booth at a seriously reduced price of **only €10 apiece**. These beautifully-illustrated and comprehensive books make fantastic gifts for your colleagues or a conversation starter in your practice or on your coffee table. Leave some room in your suitcase for these unique editions.

