

## Unmoderated ePosters

### UI Rising to the occasion: evolution of the vacuum erection device

**Humayun-Zakaria N<sup>1</sup>, Wharton I<sup>1</sup>**

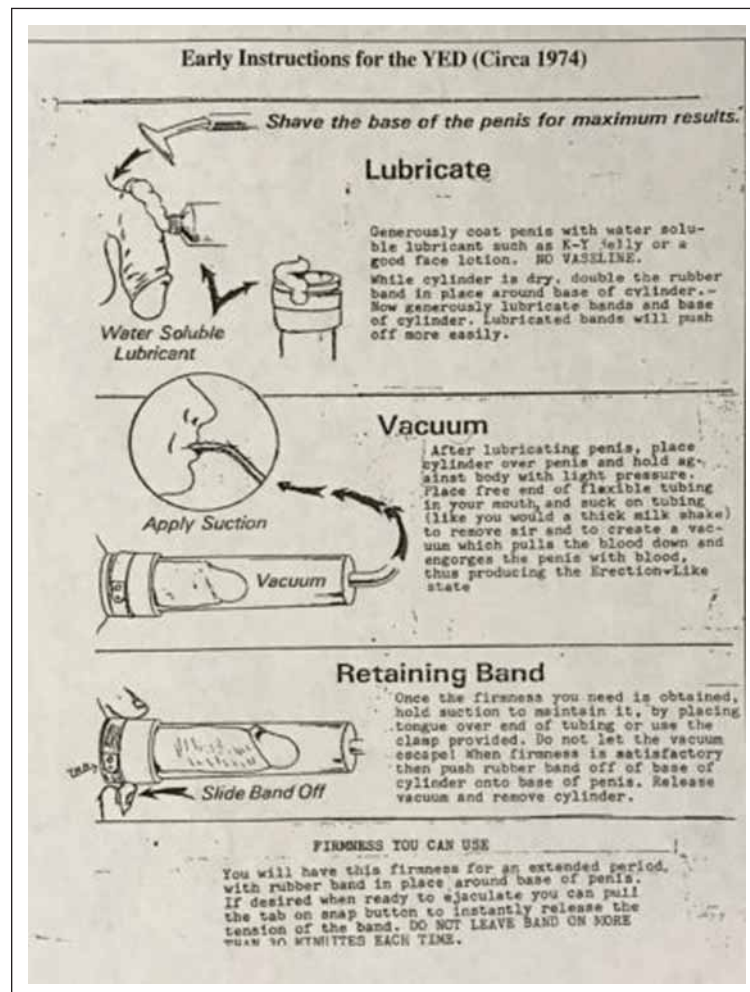
<sup>1</sup>University Hospital Coventry & Warwickshire, United Kingdom

Vacuum Erection Devices (VEDs) have become the mainstay non-invasive mechanical therapy for erectile dysfunction. Although John King is widely credited with the original publication describing VED ('the glass-exhauster'; 1864) in his book 'The American Physician/Domestic Guide to Health', it was French physician Vincent Marie-Mondat who actually published first.

In 'On Sterility in the Male & Female' (1843), Marie-Mondat described his 'Congester'; an open-ended cylindrical device with an exhaustive-pump at one end, which drew

blood into the corpora to stimulate an erection. He described four individuals who were unable to attain erections and claimed that with use of his device, they achieved erections of maximal length and girth.

Professor Zabłudowski subsequently described use of abdominal massage with the addition of a pyriform glass-vessel similar to that described by King (1908). Significant outcomes were reported. However, all these devices were unable to maintain erection once removed. Austrian Otto Lederer resolved the issue when he patented a device that used a constriction ring along with drawing pressure to engorge the penile vessels and keep tumescence (1917). Design barely altered until 1974, when Geddings Osbon, an automotive worker, marketed his 'youth-equivalent device'. After losing intimacy with his wife, he spent 20 years using his knowledge of vacuums from retreading tyres to perfect and refine VED design. Due to safety concerns, it was not until 1982 that the FDA granted permission to market his VED as a prescription-product. Subsequent work by Witherington, Nadig and then Lue helped the device gain medical recognition, and ultimately AUA recommendation for organic erectile dysfunction treatment.



UI: Figure 1

## U2 Urologists to the desert rats – serendipitous skills of the World War II urologists

**Grice P<sup>1</sup>, Lee X<sup>1</sup>, Goddard J<sup>1</sup>**

<sup>1</sup>Leicester General Hospital, United Kingdom

The defining skills of the early urologists were those of endoscopy. On the outbreak of World War II British doctors of all grades, specialities and skills were mobilised into the Royal Army Medical Corps (RAMC) and deployed to all theatres of war. Two of these doctors were Urologists and were both sent to the desert war of North Africa.

George Young Feggetter specialised in Urology having worked under Canny Ryall and Terence Millin who were pioneering TURP prior to World War II. The majority of his wartime operating was trauma, although his skills as a Urologist bore fruit as a significant increase in stone disease in the hot climate meant his cystoscopy and retrograde studies coupled with his ability to manipulate ureteric stones were of significant value.

Denis Smith Poole-Wilson was a Urologist in Manchester before joining the war in the same campaign. In Naples, and subsequently Rome, he set up his own 100-bed hospital colloquially known as 'Poole's Piss Palace' where he cared for open bladder and urethral injuries as well as the heavy workload of stone disease. Like Feggetter, he was a founding member of the British Association of Urological Surgeons, serving as president from 1965-1967.

During World War II, cystoscopy was a specialist skill that could only be provided by Urologists which proved to be of huge importance on a high risk group of stone formers. Feggetter and Poole-Wilson were already specialists in stone disease and it was serendipitous that both were posted in the same war.

## U3 The pioneers of evidence-based radical cystectomy with pelvic lymph node dissection

**Clement K<sup>1</sup>, Manson R<sup>1</sup>, Bhatt J<sup>1</sup>**

<sup>1</sup>Queen Elizabeth University Hospital, Glasgow, United Kingdom

**Introduction and Objectives:** Since the first radical cystectomy was described in the 1800s, multiple alterations to surgical technique have emerged. Herein we describe the major contributions by Willet F. Whitmore and Victor F. Marshall to an early evidence base for this major yet potentially curative operation.

**Methods:** A detailed Google and Pubmed search was undertaken.

**Results:** Cystectomy is reported as first being performed in Cologne, Germany by Bardenheuer in 1887. However, Whitmore and Marshall, working out of Cornell University, New York, are credited with the first description of the operative technique and long-term outcomes for radical

cystectomy with bilateral pelvic lymph node dissection (PNLD).

Marshall and Whitmore first advocated for PNLD during cystectomy in 1949. They then published outcomes on their first 100 patients in 1956. However, it wasn't until 1962 that they published what is now seen to be a seminal paper in the evidence regarding improving mortality for invasive bladder cancer with radical cystectomy and PNLD. They reported a 5-year survival rate of 21-49% despite a perioperative mortality rate of 10%. Furthermore, of the 55 patients were found to have lymph node-positive disease, they were unaware of any patient who survived >5 years unless a lymphadenectomy was performed.

**Conclusions:** There were others describing similar techniques for the above procedure around a similar time as Marshall and Whitmore. However, as Bernard Fischer, a similar surgical pioneer in breast cancer, fittingly commented decades later with respect to surgical research: "In God we trust. All others must have data."

## U4 What is Greek and Latin in urology?

**Chithiramohan A<sup>1</sup>, Subramonian K<sup>1</sup>**

<sup>1</sup>Queen Elizabeth Hospital Birmingham, United Kingdom

**Introduction:** Urology is no different from medical specialities in having a large number of terms derived from Greek or Latin. However, what significant impact has Greek and Roman mythology had on urology? This study explores the impact of the languages Ancient Greek and Latin on common urological terms, and the influence of classical mythology. This influence is worth exploring to fully grasp the meanings of commonly used words in urology.

**Aims:** Our aim is to explore the language of urology focusing on Latin and Greek derivatives. Our aim is to explore the influence of classical mythology on common urological terms in detail.

**Methods:** We reviewed historical and medical literature to identify associations between urological terms and ancient Greek mythology. We focussed on art, architecture, museums and mythological texts. From this we report the most interesting and relevant history that has led to terms commonly recognised in urology, as well as their significance and impact.

**Results:** Many commonly recognised terms in urology have a significant mythological background. These include 'priapism' from 'Priapus', 'veil of Aphrodite' from the 'Aphrodite', 'Proteus' from 'Proteus', Hermaphroditism from 'Hermaphroditus', morphine from 'Morpheus', hygiene from 'Hygeia', 'hymen' from 'Hymenaios' there is also reference to common urological conditions in Greek mythology including testicular torsion.

**Conclusion:** Ancient Greek and Latin has influenced the names of common urological terms with much of the

Greek influence being through the existence of Latin. It is clear from these examples that Greek mythology has had a significant impact on common urological terms.

### **U5 When in Rome: the reversal of circumcision described by Aulus Cornelius Celsus (c. 25 BC – c. 50 AD)**

**Brittain J<sup>1</sup>, Connor M<sup>2</sup>**

<sup>1</sup>Charing Cross Hospital, London, United Kingdom, <sup>2</sup>St George's Hospital, London, United Kingdom

**Introduction:** The ancient Roman celebration of the naked human body is still apparent today, but the appearance of an uncovered glans was treated with distaste or amusement in contemporary writings. Encyclopaedist Aulus Cornelius Celsus (c. 25 BC – c. 50 AD) described two techniques for prepuce reconstruction, which he referred to as “decircumcision” in his work *De Medicina*.

**Methods:** A non-systematic search of electronic journals and online archives regarding Celsus and his writings on surgery.

**Results:** Celsus' descriptions of decircumcision required circumferential degloving and advancement of the penile skin. The first technique was recommended for ‘children or those with congenitally shortened foreskin’. An incision at the base of the penis is made and penile skin advanced distally and stretched over the glans, creating a double layered prepuce. The distal skin is then ligated to prevent retraction.

In the second approach for ‘intentionally circumcised adults’, a coronal incision is made around the glans deep to the dartos fascia into an avascular plane, and the skin is dissected off the length of the penis. The free skin is pulled distally and a non-adherent dressing is applied between the glans and the penile skin until epithelisation occurs. Celsus gave instruction for making the non-adherent dressing dressings which contain lead oxide to prevent inflammation.

Food was withheld for days postoperatively in the belief that a weak and hungry state prevents erections.

**Conclusion:** Celsus' description of preputial restoration gives insight into the development of urological surgery in antiquity and the cultural attitudes towards circumcision.

### **U6 Henry Hugh Clutton: of stones and bones**

**Mahesan T<sup>1</sup>, Drummond L<sup>1</sup>, Ali A<sup>1</sup>**

<sup>1</sup>Frimley Park Hospital, Surrey, United Kingdom

Henry Hugh Clutton was born on July 12th 1850 at Saffron Waldon. He attended Marlborough College before being admitted to Clare College, Cambridge. From 1872 he studied at St Thomas's Hospital where he became a full surgeon in 1891. An avid and enthusiastic teacher, he was

notorious for his style of describing surgical practice in terms of pathology rather than anatomy.

**Eponyms:** In 1886, the *Lancet* published “Symmetrical Synovitis of the Knee in Hereditary Syphilis”, in which Clutton detailed 11 cases of affected children. He correctly predicted that in time, evidence would demonstrate that the condition affected many joints, not limited to the knees, and in subsequent literature this is now well documented. In time this symmetrical hydrarthrosis came to be known as ‘Clutton Joints’. Clutton Sounds were introduced to England by Clutton, but in fact their initial designs hail from Fessendon Nott Otis, an American surgeon. The extent of Clutton's contribution to the design and distribution of these instruments remains unclear.

The final of the Clutton eponyms is the Clutton curve introducer. A direct link to Clutton himself remains unlikely as Frederic Foley described his catheters over 20 years after Clutton's death, but the shape of the introducer undoubtedly mimics Clutton's hockey shaped urethral dilators.

**Other pursuits and ill health:** Outside of practice, Clutton took on a number of roles, including that of the last president of the Clinical Society. His health remained frail throughout his life and he subsequently died at home aged 59 after a prolonged illness.

### **U7 Mastering stones and bones: Henry Jacob Bigelow (1818 – 1890)**

**Connor M<sup>1</sup>, Brittain J<sup>2</sup>**

<sup>1</sup>St. George's University Hospitals NHS Foundation Trust, London, United Kingdom, <sup>2</sup>Charing Cross Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom

**Introduction:** In the early 19th century ‘lithotrity’ emerged as the treatment for bladder calculus and an alternative to the then much feared ‘cutting for the stone’ of lateral-perineal or supra-pubic lithotomy. Lithotrity was then performed in multiple sessions, causing complications as stone fragments were left to pass. Henry Jacob Bigelow (HJB), a Professor and surgeon at Harvard University, augmented lithotrity pioneering a new procedure known as ‘litholapaxy’.

**Methods:** A non-systematic search of the literature of electronic journals, books and online archives was performed pertaining to HJB's urological research.

**Results:** HJB wrote his seminal paper ‘lithotrity in a single setting’ in 1878. Building on the work of Sir Philip Crampton and Dr Joseph Clover, HJB challenged the view at that time that extreme brevity was required in stone surgery, born from the misinterpretation of data relating to post-instrumentation sepsis. HJB took the opinion that all stones should be cleared in a single session under general anaesthetic irrespective of operating time. HJB made three distinctive changes: i) increasing the evacuating tube

calibre ii) shaping the scope to depress the bladder floor  
 iii) using an elastic and glass bulb to evacuate stone fragments. HJB presented excellent morbidity data for his trial series with no mortality. HJB went onto perform the first hip joint excision and described the 'y' or iliofemoral ligament.

**Conclusion:** HJB was a pioneering surgeon and eminent engineer of surgical appliances. Endourology owes a debt to this orthopaedic surgeon whose single session litholapaxy remains the basis of our current practice.

### U8 Francis Seymour Kidd (1878 – 1934) – urologist and co-founder of British Journal of Urology (BJU)

**Lee X<sup>1</sup>, Grice P<sup>1</sup>, Goddard J<sup>1</sup>**

<sup>1</sup>University Hospital Leicester NHS Trust, United Kingdom

**Introduction:** Widely known as the co-founder of the British Journal of Urology (BJU) in 1929, we present Kidd's passions and contributions to urology.

**Method and Materials:** A systematic search of online and published material relating to the subject was carried out.

**Results:** As the founder of the genitourinary department at The London Hospital, Kidd believed that no urologist could hope to be successful or even competent unless he was fully acquainted with venereal diseases of the urethra. He also knew the might of the pen and contributed frequently to journals. Kidd wrote 4 major books in which his best-known work was on the Common Diseases of the Male Urethra. It was a guide written for the inexperienced but showed him best as a clinician and a teacher. He was a skilled surgeon and designed Kidd's Ball, for endoscopic fulguration of bladder tumours. Unfortunately ill-health forced him to resign in 1920. Despite this, he continued to contribute immensely, helping to establish the urological section of Royal Society of Medicine (RSM) and lecturing in USA and Europe.

Without doubt, Kidd's greatest achievement was the creation of the BJU. Despite criticism from colleagues during its infancy, he persevered and through his passion, it is

now world renown and official journal for 6 international societies.

**Conclusions:** Francis Kidd's work in BJU and enthusiasm in writings created a foundation of shared evidence-based medicine and remains an inspiration to those who have dedicated themselves to the world of urology.

### U9 John Wickham (1929-2017): a celebration

**Hodgson D<sup>1</sup>, Menzies-Wilson R<sup>1</sup>**

<sup>1</sup>Queen Alexandra, Portsmouth, United Kingdom

**Introduction:** John Wickham is arguably, the British Urologist who has had most influence over the development of medicine beyond our specialty. Following his death last year, now is an opportune time for us to reflect on his contribution both to Urology and minimally invasive therapy.

**Methods:** One of the authors had interviewed John in 2009. The transcript from this, John's autobiography and writings, his obituaries and contributions to a blog in his honour formed the sources for this presentation.

**Results:** After training in London and the United States, John was appointed as a consultant at "Bart's" (his Alma Mater) in 1968. He was horrified by the brutality of some of the operation that he witnessed and his drive to innovate came from a desire to lessen the harm that patients suffered from conventional surgery. He experienced considerable resistance from many contemporaries, but also support at home and internationally from within and beyond Urology and he was central in establishing links between these enthusiasts, and indeed, it was John who coined the phrase "minimally invasive surgery". He was the first in the UK to introduce lithotripsy, laparoscopic nephrectomy and PCNL, but perhaps his most significant contribution was the development of the autonomous prostate resecting "probot" – an achievement preceding contemporary robots by 20 years.

**Conclusions:** John was able to achieve what he did, firstly, from a belief that he was doing the right thing by his patients, and secondly, by his ability to share his enthusiasm with others to drive innovation forward.