

## SURGICAL HISTORY

### SH001 PIONEER WOMEN DOCTORS – IN WAR AND PEACE

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In Victorian and Edwardian times, women had difficulties both entering medical schools and establishing their practices.

For many there is a common thread – their work with the Scottish Women's Hospitals in Europe during World War I.

In this group, Agnes Bennett became the first female commissioned officer in the British Army and Lilian Cooper was a foundation fellow of the Royal Australasian College of Surgeons.

Their legacies were many and far reaching – far beyond the few that traveled this difficult road.

### SH002 THE LIFE AND TRIALS OF DIAMOND JIM BEANEY, MELBOURNE 1876

D. L. MURPHY

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Diamond Jim Beaney (1828–1891), otherwise known as Champagne Jimmy, led a controversial and colourful surgical life in Melbourne.

He arrived in Melbourne in 1857 and was elected as an honorary surgeon to The Melbourne Hospital in 1860 for 5 years and then re-elected under controversial circumstances in 1875 serving until 1890.

He was the first in Australia to publish a medical text book and is seen by some as a true colonial pioneer in the area of colo-rectal as well as children's medicine and welfare in his adopted land.

He was charged with murder on one occasion. He was the subject of a controversial coronial inquest into the death of a patient, subsequent to a trans-perineal cysto-lithotomy.

His notoriety during life changed to benevolent acceptance in death, in that he is remembered at The University of Melbourne for bequeathing an annual award to the principal surgical and pathology scholars, in their final exams.

'The Beaney Prize'

### SH003 HOW DID WE GET OUR NAME?

G. Low

*Box Hill Hospital, Melbourne, Victoria, Australia*

In 1920, Louis Barnett of Otago University proposed the formation of a surgical group in New Zealand which was to be distinct from the British Medical Association. This met fierce opposition from the latter organisation. In Australia, a similar proposal was also rejected by the BMA. Many events and negotiations were to take place before the successful inauguration of our College in February, 1927. This was seventy-nine years ago. It was not until 1931 that we received our full and proper name of the Royal Australasian College of Surgeons.

### SH004 PILLARS OF SURGERY

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A chance observation, that both the Playfair building of the Royal College of Surgeons of Edinburgh and the Barry building of the English Royal College, have their porticos supported by six Ionic pillars, prompted an interest in the architectural history of the two Royal Colleges. The further discovery, that

the portico of the Melbourne headquarters of the Royal Australasian College of Surgeons resembles the side porches of the Playfair building by having square pillars in pairs at its corners, has broadened the scope of this enquiry.

### SH005 SATIRE IN MEDICINE AND SURGERY

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Satirical prints and drawings have been popular for centuries and politicians and prominent people have been fair game for the barbed pen of the artist. The medical profession has come in for its share of satire usually in relation to the treatment available and the fees charged.

A collection of satirical sketches involving the medical profession would fill many volumes. Some samples of satire from the 18th century to the present day will be presented.

### SH006 SKULL TREPANATION IN PNG

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Skull trepanation is an ancient art and has been recognised in many, if not most, primitive societies. Papua New Guinea came into contact with Europeans in the late 1800's and therefore it was possible for the art to be documented at a time when cranial surgery in Europe was still in its infancy.

Richard Parkinson was a trader turned amateur anthropologist who was able to observe the surgical procedure being practiced in Blanche Bay. Trepanation was also witnessed by Rev JA Crump. In New Britain the operation was performed for trauma but in New Ireland it was also employed for epilepsy, severe headache, particularly in the first 5 years of life.

There was however a tendency to operate on frontal depressed and open fractures, rather than temporoparietal ones. Once the decision to operate was made the wound was irrigated in coconut water and this was also used to wash the hands of the surgeon. Anaesthesia was not required as the patient was unconscious. The procedure will be described and the tools used. Of particular interest is the observation of brain pulsations and their relationship to a successful outcome.

The outcomes were good, in that 70% of patients were thought to survive, contrasting with a 75% mortality for cranial surgery in London in the 1870's. There is supporting evidence in that many trepanned skulls show evidence of healing and life long after the procedure was completed. Other societies have reported similar survival rates. The good outcomes may have been due to wise case selection as well as a high level of surgical skill following sound principles of wound debridement rather than necessarily the drainage of a haematoma.

### SH007 19TH CENTURY PARIS: THE HUMAN BODY AND THE URBAN SPACE

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In mid-19th century Paris, a hub of medical and surgical innovation, the piercing, anatomical gaze of modern surgery looked beyond the operating table to the city itself, inspiring one of the most dramatic public projects in history. Guided by a vision of Paris as a functional human body, Napoléon III and Baron Haussmann created the Second Empire's remarkable infrastructure of roads, sewers and parklands through a radical process of debridement and refashioning. Their 'corporeal' approach to the urban planning of Paris exemplifies the prevailing 19th century fascination with the human body, evident in the museums and literature of the era, and in the fiery debates at L'Académie de Médecine surrounding the cholera epidemics of 1832 and 1849.

This presentation first explores how the body became the object of the voyeuristic public gaze, through the wax dioramas of the Musée Grévin, the huge exhibition hall of the Morgue de Paris and the Musée Dupuytren's popular

anatomical specimens. A foray into realist literature of the time reveals a similar 'surgical fascination', with particular focus on Gustave Flaubert's *Madame Bovary* – described by the author as 'written with the point of a scalpel' and detailing the doomed procedural efforts of a rural surgeon. An insight into the tumultuous cholera epidemics will highlight Louis Pasteur's revolutionary, yet controversial, contagion theory, and 19th century ideas connecting class, morality and health. These approaches to the human body will be drawn together to demonstrate both the elegantly precise 'anatomy' of the great organism that is Haussmann's Paris, and the city's paradoxically unscientific relationship with the individual bodies that populate its boulevards.

#### SH008

### EINSTEIN, HITLER, KENNEDY – HOW 21ST CENTURY SURGERY COULD HAVE CHANGED THE 20TH CENTURY

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Three of the most influential figures of the 20th century suffered from surgical conditions that would have been treated dramatically differently in 2006 than was the case forty or more years ago.

Albert Einstein was the pre-eminent scientist of the 20th century. He also had an abdominal aortic aneurysm. He underwent surgery in New York in 1948. This state of the art procedure involved wrapping the offending vessel with cellophane! Einstein survived the procedure but never truly worked again and eventually died of a leaking aneurysm.

Adolf Hitler was the century's most infamous figure. Responsible for the deaths of more people than anyone else in history, Hitler also suffered from periodic bouts of abdominal pain and jaundice – quite possibly due to gallstones. Several of his worst purges are known to have occurred after such attacks of pain – one can only speculate on what may have been if laparoscopic cholecystectomy had been available.

John Fitzgerald Kennedy was one of the most charismatic and loved Presidents of the United States of America until his assassination in 1963. His chronic back pain required him to wear a stiff brace that forced him to sit bolt upright. He was only killed by the second bullet that struck him. Would successful back surgery and therefore no brace have saved his life?

This paper explores the surgical histories of these famous men and applies modern surgical investigation and treatment to their conditions. Would history have changed if we knew then what we know now?

#### SH009

### GORDON BELL'S DREAM

A. W. BEASLEY

*Medical Research Institute of New Zealand, Wellington, New Zealand*

In 1969 Sir Gordon Bell wrote an essay on the birth and growth of the College. In it he wrote, 'Some day, Deo volente, I shall produce an eloquent evaluation of what Australasian medicine owes to the Scot.' But he died the following year and the evaluation was never written.

This paper traces Sir Gordon's career from the lowland Scots farming days of his forebears to his achievement of the College's highest office and his mellow retirement, as a prelude to the very evaluation that eluded him in his lifetime.

Note: This paper is designed to introduce the Scots/Australasian session of the Section of Surgical History (on the Friday of the ASC).

#### SH010

### SCOTLAND TO SYDNEY AND MORETON BAY WITH 2 SURGEONS IN THE EARLY 19TH CENTURY

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From 1788 to 1850 almost all doctors in New South Wales were trained in Britain and Ireland; indeed during that time only 30 young Australians completed 5 years apprenticeships to doctors in Sydney or Hobart. A formal review by an assessment committee then led to the granting of a certificate

detailing their experience and almost every student then travelled to London or Edinburgh for further qualifications.

Andrew Gibson was born in Scotland in 1796, studied in Glasgow for 3 years and served at Waterloo as a Surgical Assistant with the British Army. After further studies in London he was commissioned as a Military Surgeon in 1826, then travelled to Sydney as Surgeon with the Royal Veterans' Company in November of that year.

Walter Scott was born in Scotland in 1787. He undertook a surgical apprenticeship, then practised locally, and in 1819 as a relatively old student of 32 years he enrolled in Medicine at Edinburgh University, qualifying 2 years later as 'Mr' Surgeon Walter Scott. He was a skilled bookkeeper and accountant and he migrated as a free colonist on the convict transport the 'Regalia', arriving in Sydney on 11th February 1823. He first selected land in the Hunter Valley and was then appointed full-time assistant Storekeeper to the Commissariat back in Sydney. When Moreton Bay was chosen by Governor Brisbane as a new convict settlement Scott sailed north with the founding party on the Brig 'Amity', arriving in the Bay on 13th September 1824. He thereby became the first doctor in the colony which became the State of Queensland in 1859.

#### SH011

### WHAT DOES AUSTRALASIAN MEDICINE OWE TO THE SCOTS?

P. A. SHARP

*Prince of Wales Hospital, Randwick, New South Wales, Australia*

Medical education during the first 100 years or so of European Australasian history was somewhat haphazard and informal. Based on the English system of apprenticeship, candidates travelled to Britain to attend, often without examination, such bodies as the two old Universities, the University of London, the two Royal Colleges, the Apothecaries' Society and the Archbishop of Canterbury.

In contrast, Scottish medical education had developed into a more organized form with 'uniform standards' set by the Universities of Edinburgh, Glasgow, Aberdeen and Dundee.

Those who founded the Faculty of Medicine in Sydney in 1856 were products of the British system and would have been aware of its defects. The long delay that took place before the school actually opened gave the profession in Sydney time to observe the progress of the reform of medical education in England 1.

I will attempt to give a snapshot of what was happening in Sydney in 1883. In this year Ludwig Bruck had published *The Australasian Medical Directory and Hand-Book* (stating where and when doctors had gained their diplomas and degrees), the medical school at the University of Sydney started under the stewardship of Professor Anderson Stuart and Robert Scot Skirving aka 'The Hermaphrodite' arrived in Sydney.

Mention will be made of the similarities and the differences between the Sydney, Melbourne, Adelaide and Dunedin medical schools.

#### SH012

### HAMILTON NAKI – PROSECTOR, PIONEER, POLITICAL PAWN

C. J. MERRY AND M. E. LAROBINA

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Hamilton Naki was a black lab technician at Groote Schuur Hospital, Cape Town. After his death, on 29th May 2005, it was widely reported that he had been responsible for procuring the donor heart during the world's first heart transplant. During interviews in 2002 and 2003 he described his role in the operating theatres. Multiple press outlets, including the *New York Times*, *The Economist* and the *SMH* ran stories reporting that despite his pioneering role in this landmark operation, his work remained unrecognised, he retired on a gardeners pension and died penniless.

However, less than a month after these articles appeared, those facts were challenged and it became apparent that despite his pioneering work in the animal laboratories he was never involved in human surgery, and the first he heard of the transplant was over the radio. Later, in those interviews, he changed his story.

This occurred not because of the confusion of old age but because of pressure from those around him. He was a martyr to apartheid: debarred from the proper exercise of his skills, and fair pay, by a racist regime. Thus, his role was embellished in post-apartheid, black-ruled South Africa. By the end, he

came to believe it. Now his history is besmirched, a result of political game playing by journalists and ill informed commentators.

This presentation reviews his story and highlights the mistakes that can be made when facts are unchecked in the face of political pressure and 'the lure of a great story'.

### SH013 ASTLEY COOPER'S FIRST AND UNSUCCESSFUL CAROTID LIGATION (1805)

**R. S. A. LORD**

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Although pre-Vesalian anatomy and its functional correlation was rudimentary, in naming the carotid arteries ('Vessels of unconsciousness') the Alexandrian School (Ca 300 BC) recognised that carotid injury could cause stroke and death. Thus surgeons were reluctant to undertake carotid ligation even though ligation of limb arteries had been practised from antiquity. JG Hebenstriet, a notable exegesist of Greek medical terms, ligated the carotid artery for haemorrhage in 1793 followed five years later by John Abernethy, and later again by David Fleming (1803).

Astley Cooper's carotid ligation in 1805 though unsuccessful was based on sound experimental and anatomical evidence of collateral pathways and was followed in 1808 by the first successful elective carotid ligation. Cooper's 1805 patient died 20 days after operation, Cooper himself attributing the death to sepsis with compression of the pharynx and larynx. However, the preserved specimen when examined in 1984 by the author showed little evidence of inflammation but rather massive thrombus accumulation. Since the patient had developed hemiparesis on day 8, thromboembolism might have caused or contributed to her death. Cooper's second and successful carotid ligation changed the management of carotid disease. By 1968 Pilz was able to report 43% mortality in a review of 600 carotid ligations. Carotid occlusion continues to be practised, though nowadays permanent occlusion is based on physiologic predictors of collateral adequacy.

### SH014 TREATMENT OF BREAST CANCER – LESSONS FROM HISTORY

**J. P. COLLINS**

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Breast cancer is one of history's oldest maladies and the women who have endured it make up a unique sisterhood. Most suffered in silence but a few, by way of their station, writings or the artist's brush, have etched their name in history. Similarly, those who have endeavoured to improve the management of this disease have made their mark often having to challenge the prevailing dogma of the day.

The primitive and painful surgery of Guillotine-type knife amputation or tumour cauterization followed almost inevitably by anaemia, septicaemia and death, encouraged most women to conceal their disease and surgeons to shy away from its surgical management. It took centuries and the development of asepsis and antisepsis by Semmelweis and Lister, anaesthesia by Simpson and cellular pathology for diagnosis by Virchow to make surgery a risk worth undertaking.

Surgeons including Billroth (1871) believed surgery had no 'direct influence on the diathesis' until Halstead demonstrated in 1898 that surgery could control local disease and result in prolonged survival. More and more extensive surgery followed and the 'medicine of mutilation' or the super-radical mastectomy was born. However, Keynes in 1935 showed that a combination of conservative surgery and radium treatment gave almost identical results. Most surgeons scoffed at his claims until his findings were confirmed many years later by McWhirter and others. Similarly, studies on oophorectomy, radiotherapy, chemotherapy and mammography have each contributed to the management of breast cancer but the lessons learned from such clinical trials have frequently taken a needlessly long time to be implemented.

### SH015 FROM POPES TO PROSTHETICS

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It has been conjectured that the practice of depicting the 'hand in benediction' with the ring and little fingers flexed, which is widespread in the religious art of both the Roman and Orthodox churches, may derive from an early Pope with a Dupuytren contracture. This paper follows the artistic convention through history, and notes the coincidence that, for functional rather than aesthetic or devotional reasons, the same position of the fingers is seen in a modern prosthetic hand.

### SH016 SURGEONS AND RUBBER GLOVES

**D. A. K. WATTERS**

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Rubber gloves are used nowadays to protect the surgeon from the patient and the patient from the surgeon. Surgical gloves were first described in Germany in the late 1700's, being made from a sheep's caecum, and used to protect the doctor practising obstetrics. In 1847 Cattell suggested the use of 'vulcanised caoutchouc, or Indian-rubber'. This was for autopsy dissections as a nick to the finger could result in death from septicaemia. However, even in the mid to late 1800's when Lister first described the use of carbolic for cleaning surgical wounds, surgeons operated in their street clothes, wearing a blood-soaked apron and merely washed their hands.

Goodyear was the first to produce satisfactory rubber by vulcanisation and rubber gloves were used by surgical pioneers in the 1870's. In 1878, Thomas Forster received a British patent number for 'improvements in manufacture of gloves to be used for surgical and other operations in which it is essential to protect the hands but still retain delicate sensitivity'. Dunlop invented the bicycle tyre in Belfast (1888) and a part of the Australasian Dunlop company later became Ansell.

In Europe Zoega von Manteuffel described protection of the hands by sterilized rubber gloves and William Halstead popularised the use of rubber gloves in the US, probably in response to dermatitis induced in his theatre sister by mercuric chloride (1889). He, like many other proponents, only used gloves selectively. In 1900 few surgical textbooks mentioned the need for gloves but by 1922 it was stated, 'imperishable rubber gloves are now usually worn.' Yet surgeons continued to operate without gloves well into the mid 20th century.

### SH017 IT JUST ISN'T CRICKET

**P. A. SHARP**

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In 1913–14 Sydney University Cricket Club were premiers. Dr Claude Tozer was a member of this team. He played for New South Wales and may have represented Australia except on Tuesday 21 December 1920 he was shot dead in the home of his patient Mrs Dorothy Mort.

Earlier that year he had begun to treat her for depression. The normal boundaries of the doctor-patient relationship soon became distorted; irrevocably after Tozer, a bachelor, had told his patient, smitten with love for him at first sight, that it was better for a medical man to be married.

She shot him three times then shot herself and took laudanum.

Tozer's death sent shockwaves through Australia's sporting community.

Dorothy Mort's sensational murder trial produced scandalous headlines. She was found not guilty on grounds of insanity.

Claude Tozer is a classic case of 'what might have been' but for a fatal attraction.