

SURGICAL HISTORY

SH01 MY COUSIN ERNEST

R. S. ARNOT

New South Wales, Australia

My cousin Ernest was born into an Anglo-Irish Protestant family on 15 February 1874. My Quaker grandmother was his second cousin. Shackleton did not follow his father into medicine, but went to sea at the age of 16, and accompanied Scott to the Antarctic on the Discovery expedition in 1902. He went on to lead three Antarctic expeditions, and has been hailed as one of the world's greatest leaders. In all his travels he is acclaimed as never having lost a man, and a fellow explorer once said of him – 'for a dash to the Pole give me Amundsen, but if I am in a devil of a hole and want to get out, give me Shackleton every time'.

Recently his techniques of leadership have become widely disseminated in business, the military and many other walks of life and have been described as 'Shackleton's Way'. And yet paradoxically, Shackleton never led a group larger than 27 and he failed to reach nearly every goal he ever set.

I will also discuss the Endurance expedition of 1914–16, which is one of the most spectacular disasters of all time.

SH02 THE BIRTH OF VASCULAR SURGERY IN AUSTRALIA

S. A. MELLICK

Queensland, Australia

During and after the Napoleonic wars surgeons in Europe, Britain and America ligated peripheral arteries for symptomatic aneurysms. It is not generally known that five surgeons performed similar operations in early colonial Australia.

Andrew Gibson ligated the femoral artery in 1827 and William Bland the innominate in 1832 and 1837, all in Sydney. Edward Bedford ligated the carotid artery in Hobart in 1837 having apparently previously ligated one popliteal artery in a patient in 1835 and his other popliteal in 1837. Colin Buchanan of Port Stephens tied the femoral artery of a patient in Stroud in the Hunter Valley in 1847, possibly the first major operation performed under general anaesthesia in Australia; and somewhat later Frederick Milford in Sydney ligated the femoral artery in St Vincent's Hospital in 1869, again under general anaesthesia.

None of these isolated cases was included in an extensive review article in 1847 by G W Norris of Philadelphia, who recorded no less than 118 ligations of the external iliac and femoral arteries between 1796 and 1842, with an overall mortality of 33 (28%). Bland's operation in 1832 escaped his scrutiny despite its being reported in *The Lancet* Volume I 1832/3.

It is timely that the work of these pioneer 'vascular' surgeons and their place in the history of vascular surgery in Australia be acknowledged.

SH03 SLAVERY, SERPENTS, SPELLS & SURGERY: DR ETIENNE RUFZ DE LAVISON IN MARTINIQUE

K. J. ROBSON

University of Melbourne St Vincent's Health, Victoria, Australia

Martinique, an island in the archipelago of the Lesser Antilles, and today a department of France, was throughout the 19th century a much-feared outpost of the French empire. "This is a region", wrote one early commentator, "where the land is shaken by earthquakes, the towns turned upside down by hurricanes, the air poisoned by yellow fever, and the different social classes in a perpetual state of hostility". The healthcare needs of Martinique's diverse population were shouldered by a small mix of military surgeons, civilian doctors and local healers.

In 1804, Etienne Rufz de Lavison was born to Creole nobility in St Pierre, Martinique's thriving, cosmopolitan former capital. Sent to mainland France at the age of 13, Rufz studied medicine in Paris before returning to St Pierre,

where he spent 20 years as a clinician, scientist and prolific historian. A man of astonishing intellectual curiosity, with a self-confessed 'mania for writing', Dr Rufz's publications encompass local surgical techniques, the yellow fever epidemics, snake bites, plantation and slave health, ethnology, island flora, and the effects of climate. An innovative practitioner, he was a pioneer of anaesthesia on the island. Dr Rufz was also a leader in health politics; he inaugurated Martinique's public hygiene campaigns, led the vaccination committee, established the colony's first psychiatric hospital, and became mayor of St Pierre.

The quintessential Renaissance man, Dr Rufz upheld the belief that good medical practice requires an understanding not only of disease, but of history, people and the natural world. The story of his life and work offers a vivid portrait of early colonial medicine and surgery.

SH04 BASIL KILVINGTON—SURGICAL SCIENTIST

J. P. MASTERTON

Royal Australasian College of Surgeons, Victoria, Australia

Basil Kilvington, son of the Rev. James Kilvington, was born in Hartlepool in the North of England on August 6th. 1877. His schooling began in Greenock but in 1888, when he was eleven, the family migrated to Victoria where he attended Camberwell Anglican Boys' Grammar School which had been founded just two years earlier. He must have been a bright and capable student because in 1893, when barely sixteen, he matriculated in the Faculty of Medicine of Melbourne University and graduated M.B., B.S. in 1898 at aged 21.

He became a resident medical officer at the Royal Melbourne Hospital but retained an interest in teaching and research as a tutor at Trinity College. His academic leaning is reflected in his being awarded M.D. in 1901 and M.S. in 1902. Thereafter he had a distinguished career as both a surgeon and researcher particularly in the field of neurology and nerve regeneration.

When he died in 1947 aged 70 the obituaries by Sir Albert Coates and others all bear fulsome testimony to a remarkable man. Above all he was a thinker and a man of great compassion and gentleness both in his surgical technique as well as his dealings with his fellow man. He was one of the College's Founding Fathers and perhaps deserves better recognition.

SH05 IMAGES OF FREYBERG

A. W. BEASLEY

Wellington, New Zealand

Bernard Freyberg was brought to New Zealand as a two-year old boy, educated in Wellington, distinguished himself as a swimmer, began a career as a dentist, then sailed to England. He arrived in time to become part of the Royal Naval Division at the outbreak of the 1914–18 war, won his first DSO at Gallipoli, and his VC in France the following year. He became friendly with J M Barrie, who was his best man when he married in 1922.

In the 1939–45 war he commanded the NZ forces in the Middle East and Gallipoli, and was then appointed governor-general of NZ, his term being extended to six years. This paper traces his career with reference to his portraiture.

SH06 WITTGENSTEIN AND THE CONCEPT OF "WOUND SHOCK"

G. J. STEWART

Rural Medical School, ANU Medical School, New South Wales, Australia

Ludwig Wittgenstein was one of the most influential and controversial philosophers of the 20th century. His ideas concerning the foundations of mathematics and the role of language remain of essential importance in these fields, while his eccentricities still warrant popular examination. During World War II, having relinquished his chair in philosophy at Cambridge University, he worked as dispensary porter and as laboratory assistant. In these roles and in association with the MRC Research Unit, initially at Guy's Hospital, London and latter at the Royal Victoria Infirmary, Newcastle-on Tyne, he was involved

in investigations of what was then termed “wound shock”. These studies were carried out on air-raid and latter industrial accident victims, under the leadership of Grant and Reeves, latter E.G. Bywater.

Today, we would recognise the poorly defined clinical syndrome of “wound shock” as manifestations of hypovolaemia. This entity had been recognised since the trench warfare of the First World War, but it is amazing to realise that as recently as the mid decades of the last century, the understanding of the physiology of injury was so rudimentary that this relationship was not recognised.

It is instructive to examine Wittgenstein’s role in discussion of the semantics of the term “shock”, which persists in causing confusion in the popular mind, as well as his experimental efforts. The development of understanding concerning hypovolaemic shock and crush injuries following the London Blitz shows how recently some of the most basic concepts on which we manage patients have become evident.

SH07 LOCH NESS SAS AND THE FIRST SURGEON IN PARADISE

D. A. K. WATTERS

University of Melbourne, Victoria, Australia

Robert Kenneth Wilson was born in Madagascar in 1899, the son of a Scottish missionary doctor. As a boy he was raised by his elder sister and developed a keen interest in natural history. He served in the first world war before studying medicine at Cambridge. He married Gwen Gulliver, an Australian in 1924. They had two sons. In 1926 he gained his FRCSEd and set up practice in London. During the 1930’s he was a court expert in ballistics together with Lord Gerrard Burrard. He wrote a definitive textbook on Automatic Pistols which was published during World War II. In 1933 he took the photo of the Loch Ness Monster which was only admitted to be a hoax in 1992. In 1939 he walked out of his practice, rejoined the Royal Artillery but in 1942 joined the elite SAS. He was decorated in Holland (orange order) and France (croix de guerre) before being parachuted into Borneo with Australian troops in 1945 to serve in Z force with SEMUT 2. In 1950 he went to PNG as the first fully qualified surgeon and was posted to Rabaul (1950–53) and Port Moresby (1953–56). He is remembered by his anaesthetist and nurses as an excellent general surgeon who could turn his hand to anything, though his results with thoracic surgery were probably suboptimal. In addition to surgery he was an expert fisherman and shot. He died in 1969 of oesophageal cancer. He served with distinction in every phase of his life.

SH08 AL-ZAHRAWI – THE FATHER OF SURGERY

Z. AHMAD

St. Thomas’ Hospital, Middlesex, United Kingdom

A pioneer in all fields of surgery, Al-Zahrawi developed numerous original techniques as well as instruments. He published the first ever surgical encyclopaedia entitled “At-Tashrif”. His way of thinking and practice of surgery inspired many subsequent great surgeons. As a result of his imperious work and contribution to surgery, he has been given the title of ‘Father of Surgery’, and provided yet another beacon of light in the dark ages. In his many papers and manuals, he describes various operations and procedures which had never been recorded before. Some have described him as the first ever plastic surgeon, notably for his attention to and methods of incision, use of silk thread suture to achieve good cosmesis. He describes what is thought to be the first attempt at reduction mammoplasty for the management of gynaecomastia. He gives detailed descriptions of other basic surgical techniques such as cautery and wound management. The aim of this paper is to highlight and remind us of the invaluable contributions made by this remarkable pioneer in the field of surgery, which have acted a preamble for many techniques and procedures used in the field of plastic surgery.

SH09 ANTARCTIC MEDICINE

P. A. SHARP

Prince of Wales Hospital, New South Wales, Australia

From the earliest classical cartographers, belief in the existence of a ‘Terra Australis’ was widespread. There had to be a great southern land to balance the geography of the world. Inexorable plate tectonics may have separated Australia and Antarctica 45 million years ago but it was only within the last few hundred years that Abel Tasman and James Cook isolated and defined them as separate lands for science, politics and strategy.

In 1901, the Australian colonies had just federated and formed a nation, the Commonwealth of Australia. The International Geographical Congress had proclaimed 1901 as ‘Antarctica’ year. The heroic age of Antarctic exploration was underway.

Antarctic medical practice is unique because there is no indigenous population.

This review starts with the primitive medicine practiced by doctors on board with Captain James Cook in 1775. The heroic era of Scott, Shackleton, Amundsen and Mawson was followed by a highly mechanized transition period and ends with modern medicine used in permanent stations and research.

In Antarctica, we have Earth’s remaining tenuous links with outer space (the last two great frontiers). NASA scientists have used Antarctica to test lunar survival strategies because ‘this is as close to lunar conditions as we could get here on Earth’.

SH10 TEACHING AND LEARNING ANATOMY IN MELBOURNE OVER 150 YEARS

J. P. COLLINS

University of Melbourne & RACS, Victoria, Australia

The teaching of anatomy which began unofficially in Melbourne 150 years ago was formally established with the passing of “An Act for Regulating Schools of Anatomy” in 1862 by the Victorian government. Armed with this Act, the University of Melbourne founded its medical school later that same year.

The development of anatomy teaching and the separation of anatomy from pathology one hundred years ago, is a colourful story in which several local personalities played their part. Commencing in an improvised out-building of his home, the first professor, George Halford began teaching anatomy in May 1863, the first such course in Australia. He was followed by Allen, Berry, Wood Jones and many others, each of whom was to make their own contribution.

The influence of surgeons including George Adlington Syme was paramount from the beginning and frequently the teaching of students only survived through their efforts. It was Wood Jones, who first drew attention to the negative aspects of the preservative formaldehyde and the artificial descriptions of anatomy which resulted. He warned in 1923, that “students will one day have to readjust their ideas, since they deal with the living but it is only now that living anatomy has fully taken its place in anatomy learning, through the use of telescopic views and the newer imaging techniques of the living body.

From simple beginnings, this department has evolved into a world leader in innovation and its award winning multi-media package An@tomedia has brought the teaching and learning of anatomy into a new dawn.

SH11 THE MEDIEVAL ENGLISH CORONER

P. A. SHARP

Prince of Wales Hospital, New South Wales, Australia

The office of Coroner is a uniquely English institution. Scotland never had coroners. England exported her Coroner to almost everywhere coloured red in the Victorian atlas. The first mention of the Coroner dates from the reign of Alfred the Great. We have no records of that period.

The Coroner, as we know him today, dates from September 1194, during the reign of Richard the Lionheart whose interest in England was as a source of money to help finance his obsession with warfare.

Much of today's English legal structure was born in the last decade of the 12th century. The edict that formally established the Coroners was Article 20 of the "Articles of Eyre" in September 1194. In 1195, Justices of the Peace were established. Ironically, they became the major reason for the decline of the Coroner in later centuries.

Coroners originally had to be Knights and men of substance. They were unpaid. Their prime function was to service the Royal Courts of Law, the General Eyre, which circulated slowly around the kingdom. This took so long to return to each county that, unless careful records were kept by the coroners, many cases never came to trial and potential revenue was lost to the Crown.

Other activities of the Coroner includes jurisdiction over "treasure troves", shipwrecks and catches of royal fish: the whale and the sturgeon. Historically, his most important role, the only one to survive until today, was his role in the investigation of sudden death.

SH12 HISTORY OF SURGERY IN NEW GUINEA 1921-1942

D. A. K. WATTERS

University of Melbourne, Victoria, Australia

New Guinea was governed by Australia under Mandate from the League of Nations. Information was obtained through review of personnel files in the National Archives, interviews with former residents or family members and from biographies. It was a time when surgery in the separate territories of Papua and New Guinea was conducted by general doctors who were selected often on availability, stability and knowledge of tropical medicine. The two territories had different pay scales and different staffing arrangements. A mix of missionaries, mercenaries and madmen were recruited. These were wild days, plantations and gold rushes, when mavericks such as Errol Flynn were on the loose. It was often alleged surgical incompetence that determined whether someone was regarded as suitable or not. Doris Booth, a nurse and the first white woman prospector, set up a hospital on the Goldfields in 1926. Some MO's did only a few months filling positions of "desperate need" whilst others, such as ET Brennan, Backhouse, Dickson and Sinclair made significant contributions. By 1927 Raphael Cilento (1924-29) was Director of Public Health with 9 Medical Officers stationed in Rabaul (2), Kavieng, Madang, Manus, Aitape, Morobe with one travelling and one relieving medical officer. Europeans were treated at the Namanula hospital and natives at the Rapindik Native Hospital (est 1930) at Matiep. Theodore Braun arrived as a Lutheran missionary doctor in 1935 and proved to be a highly competent surgeon. The period ends with the Japanese bombing of Rabaul in 1942 and the controversial evacuation of Dr Alex Price and others from Kieta, Bougainville, aboard the Bilua.

SH13 THE COLONIAL GATES OF THE MELBOURNE COLLEGE GARDENS SITE, RACS HEADQUARTERS

D. L. MURPHY

Skills Centre, RACS, Victoria, Australia

The colonial past history of the College Gardens site in Melbourne was revealed during the excavations and building of the East Wing, Victorian Training and Education Centre (VTEC).

Research has revealed a golden history for this site, which we as Fellows of the College should be proud. The College site continues with its original purpose as a place of learning.

The choice of this site as the future RACS Headquarters involved decisions by our Founders. The College Museum plans for the site are progressing, enamel signage displaying the College site's past history is proposed for the Skills Laboratory Forecourt.

This permanent display will provide a linkage between the history of this site to the current role of the VTEC, as a place of continuing education. It is fitting therefore that we look through the gates of that time to our future.

SH14 COLONEL (DR.) JOHN PAUL STAPP – CRASH TEST DUMMY, TRAUMA PREVENTION PIONEER & MURPHY'S LAW

M. P. HARDEN

Port Macquarie Base Hospital, New South Wales, Australia

Dr John Paul Stapp was not only the "fastest human on earth;" he was also the quickest to stop. In 1954, Dr Stapp attained a then world record land speed of 632 mph (1020 km/h), going from a stand still to a speed faster than a .45 bullet in 5 s on a rocket sled, and then to a dead stop in 1.4 s, all in the name of safety.

Stapp pioneered research on the effects of mechanical forces on living tissues during aircraft crashes. Stapp planned a series of tests on humans and set out to develop a harness to hold them. First, he used a dummy to perfect the harness and after 32 sled runs, he was ready to try it out on a human crash test dummy, himself. By 1954, Stapp had volunteered for 29 deceleration and windblast experiments. On his last run he sustained more than 40 g's. He suffered fractured ribs and wrist, and retinal haemorrhages which left him temporarily blind.

Whilst at the Air Force Stapp also began a car-crash study program to investigate fatalities in auto accidents. From this program, safety recommendations for the car industry were established including fastening seats more securely to the car body, improving bumper design and proving the effectiveness of seat belts. Stapp's work resulted in the 3-point restraint system of today's belts which has saved millions of lives.

Stapp is also credited with coining one of the most famous phrases in history. One of his assistants, Capt E. Murphy, rigged a harness incorrectly yielding no data on the forces Stapp was subjected to. After discovering what happened, Stapp observed, "If there are two or more ways to do something and one of those results in a catastrophe, then someone will do it that way." It has been called "Murphy's Law" ever since.

SH15 CHURCHILL AT SEA

A. W. BEASLEY

Wellington, New Zealand

Winston Churchill travelled a great deal by sea throughout his long life. This paper looks at some of his journeys and the ships in which they were made.

SH16 IMPOSTURES, DECEPTIONS AND CREDULITY

H. R. MAGEE

Queensland, Australia

In the Cowlishaw Collection of the College Library, there is a little book by an anonymous author entitled "Some Sketches of Impostures, Deceptions and Credulity". In a series of 26 chapters the author covers a variety of subjects including oracles, false messiahs, vampirism, malingering, medical delusions and many others.

Two notable examples of impostures and deceptions that played on the credulity of the public and the medical profession were Mary Tofts who claimed to have given birth to rabbits and Joanna Southcott, a self styled prophetess, who believed she had been impregnated by God and would give birth to a messiah.

Other examples of impostures were the report of the miraculous bullet, ruses used in malingering and Dr. Graham's Celestial Bed.

All of these had some temporary popularity but were all recognised as falsehoods.

SH17
PROFESSOR ROBERT GOETZ – INNOVATOR AND PIONEER IN
CORONARY ARTERY BYPASS SURGERY

M. P. HARDEN

Port Macquarie Base Hospital, New South Wales, Australia

Coronary artery bypass grafting (CABG) is one of the most significant surgical achievements of the 20th century. The contributions of Vineberg, Kolesoz, Favaloro and DeBakey are well known, but the name of Goetz means little to most surgeons. Goetz performed the world's first successful CABG on May 2, 1960, in Bronx, N.Y.

Robert H. Goetz was born in Frankfurt on April 17, 1910 and studied medicine at the University of Frankfurt. In the 1950's he studied the physiology of the giraffe, whose ability to lift its head from the ground to full height without fainting confounded zoologists, earning him the Vesalius Medal.

In 1960 Goetz developed a technique for coronary anastomosis on a beating heart using a tantalum ring on dogs. In an addendum to his article reporting this technique, Goetz announced the successful coronary mammary anastomosis between the right mammary and right coronary on a 38 year old man. The anastomosis was created in just 17 seconds. Before surgery the patient suffered from such debilitating angina that he needed 70 to 90 tablets of GTN a day. He remained pain free for 1 year and died of a posterior wall AMI. Angiogram at autopsy showed the anastomosis to be healed and patent.

This was to be the only CABG Goetz completed. Permission to present this case at a meeting of the American Association for Thoracic Surgery was denied, as it was felt that the subject of CABG was unimportant and should be forgotten. In 1982, Goetz retired from surgery and bred prize-winning Angus bulls as a hobby and died on 15 December, 2000, in Scarsdale, N.Y. He was a remarkable academic surgeon with vision that aided the development of one of the most important surgical advances of the last 50 years.