

THE FIRST APPENDICECTOMY IN AUSTRALIA WAS PERFORMED AT TOOWOOMBA IN THE COLONY OF QUEENSLAND

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There appears to be a constant demand for information relating to primacy in almost every field of human endeavour in this State, and the Royal Historical Society of Queensland is regularly and rightly consulted in this regard.

We cannot tell you where the boomerang was first used in Queensland, or who first used the message stick, but we can give you the name of the first warship to enter Moreton Bay and that of the first Postmaster for the district.

We can answer such diverse questions as: Who was the first European to sight the Brisbane River? — Where was the first sugar cane planted in Queensland and by whom? — Where and when was gold first discovered in the Colony, or the first artesian bore put down?

In the field of biography there exists a long and continuing list of firsts from the 16th century to the present time. We can tell you about the first Commandant, Governor, Premier, Minister of Religion, Judge, Chief Justice, Pilot, Aboriginal Parliamentarian and no doubt one day our honorary researchers will be asked to provide the name of the first Queenslander to land on the moon.

This present addition to the catalogue of firsts was prompted by a request from Mr. Volney Bulteau, D.L.O., F.R.A.C.S., a well-known Sydney E.N.T. Surgeon, for information that would fill a gap of 11 years in the biographical record of Dr. Herbert Russell Nolan who was an Honorary Nose and Throat Surgeon on the staff of the Royal Prince Alfred Hospital in the early years of this century.

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APPENDICITIS AS A DISEASE ENTITY

Appendicitis is an ancient disease. Appendiceal adhesions, indicating recovery from an inflamed vermiform appendix, have been found in mummified bodies from Ancient Egypt!¹

The earliest clear description of this now commonly diagnosed disease was given by Jean Fernel of Amiens, Professor of Medicine at Paris. In 1567 he recorded results of the post-mortem examination of a patient who had died from the "iliac passion", as appendicitis was then called.² From that time and until the first quarter of the 19th century, except in the field of anatomical research, there is little to report.

In 1812 James Parkinson published a definite and clear account of appendicitis as a disease entity.³ Parkinson is better known nowadays for his "Essay on the Shaking Disease" — Paralysis Agitans — a disorder of the nervous system to which his name has become attached.

Knowledge of the pathology of acute appendicitis did not at once lead to its adequate treatment. This had to await advances in other fields of medicine.

General anaesthesia was introduced in the 1840s. In the 1860s Lord Lister, following the work of Louis Pasteur, popularised the use of antiseptic techniques in surgery. This led in time to the development of aseptic techniques which eliminated the use of tissue damaging chemicals. All these advances enabled the surgeon to invade the body cavities.

The Ovariectomists or Gynaecological Surgeons as we nowadays categorise them, led the way into the abdominal cavity. It was in the light of their experience of abdominal surgery that removal of the inflamed appendix was seen to be a feasible procedure.

APPENDICECTOMY

Throughout the 1880s operation for removal of the diseased appendix gained favour both in the United States of America and Great Britain.

At first the presence of an established peritonitis was the indication for opening the abdomen for drainage. If a ruptured or grossly inflamed appendix was found to be the cause, it was removed as an incidental procedure.

Then as the diagnosis of appendicitis came to be made with more confidence, the abdomen was opened to remove the diseased appendix before it burst and gave rise to peritonitis.

Finally in 1888 Mr. Frederick Treeves, later to be knighted for his management of Edward the Seventh's appendicitis, advocated that, in the case of relapsing or recurring appendicitis, the offending organ should be removed in the interval of quiescence between attacks.⁴

For some curious reason early operative treatment of acute appendicitis and the procedure of interval appendicectomy were more readily accepted in the United States of America than in Great Britain.

It was not until the last decade of the 19th century that the operation of appendicectomy was introduced into Australia and then it was **first** performed in the provincial city of Toowoomba in the Colony of Queensland by a young Sydney graduate, Herbert Russell Nolan.

HERBERT RUSSELL NOLAN, M.B., Ch.M. (Syd.)

Russell Nolan was one of seven sons of the Rev. James Adams Nolan.⁵ His father, born at Greencastle in Ireland in 1837, had migrated to Australia and in 1860 entered the Wesleyan Methodist Ministry.⁶ The Rev. James' first pastorate was at Newtown in Sydney and in the 44 years that he served the Church he was Minister to no fewer than 14 Parishes or Circuits as they were called, both in New South Wales and Queensland.⁷

Russell Nolan's mother, from whose family the Christian name by which he elected to be known was derived, was a leader in Women's Movements and was widely known for her activity in the Women's Christian Temperance Union, of which she was for a number of years President.⁸

After Newtown the Rev. James ministered successively to the circuits of Shoalhaven, Windsor and Singleton, and his son Russell was born in 1867 in the last year of his ministry at Singleton. It was then the practice of the Church to give its Itinerant Preachers a change of circuit at intervals of three years, so that by the time Russell was 12 years of age the Nolans had lived also at Newcastle, Maitland, Sydney and Orange.⁸

In 1880 the Rev. James returned with his family to Sydney, living at Waverley for three years and then for a second time at Newtown.

It was during this period that Russell was enrolled as a student at Newington College, the well-known Wesleyan School at Stanmore. Here at an early age he gained a scholarship.

From Newington in 1885 he proceeded to Sydney University where he entered the Faculty of Medicine. His portrait appears in

a group of 14 students; the second-year medical students of 1886. This photograph is of exceptional interest since in the group appears Miss Dagmar Berne, Sydney University's first woman medical student.



Second-year medical students, University of Sydney, 1886. Dr. Nolan is wearing grey suit and black tie, in back row. Dagmar Berne (d. 1900), first woman medical student, in front row.

It was in this year, 1886, that his father was transferred to Queensland to the Brisbane Valley Circuit, where he was to remain for three years before moving to Ipswich. Toowoomba was only 70 miles distance from Ipswich and both road and rail transport joined the two cities.

In 1890 while his family was resident in Ipswich, Russell Nolan graduated M.B., Ch.B.

He did not remain in Sydney but came to Queensland where his first years after graduation were spent as a Resident Medical Officer on the staff of Toowoomba Hospital.

At the end of 1892 Nolan resigned from the full-time staff of the Hospital and entered private practice in Toowoomba. His address is given as Russell Street. At this period most General Practitioners were Physicians and Surgeons. Nolan continued to practice in both fields and held the appointment of Honorary Surgeon to the Hospital.

He must have had a talent for surgery, for in the *Australasian Medical Gazette* of 15 July 1894 he reported on the three-year sur-

vival of a patient, "T.W. aet 54, from Drayton", whose tongue he had removed in 1891 for cancer, confirmed by Dr. Eugen Hirschfeld, Honorary Pathologist to the Brisbane Hospital.⁹

In the *Australasian Medical Gazette* of 13 July 1893, he gave an account of the first deliberate appendicectomy to be performed in Australia. The date of this operation was 11 March 1893. The report reads:¹⁰

On the afternoon of the 10th of March I was called to see Mrs. W., and found her complaining of great abdominal pain; she was vomiting persistently.

For some few days previously she had suffered from pain in the back, but had continued to perform her household duties. During the previous evening, the 9th, the pain in the stomach was first complained of and the vomiting began. The bowels acted twice, and then a dose of castor oil was taken, but after that there was no result, nor had any flatus passed, but the vomiting had increased in frequency and the pain become more intense up to the time of my visit.

She was 30 years of age, and the mother of four children. The previous health good, with no attack like this before, and menstruation had occurred only three weeks ago. Hot applications were ordered, and morphia prescribed.

Late that evening I found her in all the throes of acute peritonitis, with quick pulse, rising temperature, dry skin, and thoracic respiration. Her face wore a very anxious expression, with sunken eyes and piched nose. The vomiting was continuous; no flatus had passed; the abdomen was somewhat distended and rigid, especially over its lower half, and acutely tender. After consultation with Dr. E. Roberts it was decided to operate early next morning.

At 8.30 on the following morning she was seen by Drs. Roberts, Falkiner, Garde, and myself, and it was then suggested to pass a stomach tube up the rectum. This was attempted, but such pain was produced that it was abandoned; a tender bulging mass was felt, high up, to the right of the uterus. Her condition after this became very critical, and for a time she was in a state of collapse.

Operation was delayed for a few hours, and then chloroform was administered by Dr. Falkiner, and with the assistance of Drs. Roberts and Garde, I opened the abdomen in the middle line. Some dark fluid, offensive, but not faecal in odour, exuded. The presenting intestine was drawn out and examined carefully. It proved to be the jejunum and duodenum, and was examined up to the pylorus. Beyond being intensely injected and adherent in parts, it was normal. This was returned and the ileum extracted. This was of much darker hue, being purplish in places and the adjacent folds closely adherent to each other, and marked here and there with large plaques of yellow lymph.

The cause of the trouble soon appeared in the shape of an appendix — the seat of inflammation and perforation. Dark, stinking, thick fluid exuding from two perforations about one inch from its distal end. The appendix was detached, ligatured and removed. The uterus and ovaries were normal. The cavity was irrigated with hot water, carefully dried, and a perforated glass drainage tube left in the lower end of the incision, which was united with silk ligatures.

The subsequent history of the case presented nothing worthy of remark, except that there was much flatulence during the first week, and the track of the tube discharged for some weeks.

On slitting up the portion removed, a small faecal concretion was found at the distal end, about the size of a No. 3 shot grain.

This patient is alive today as the result of a prompt operation, my only regret being that, seeing the urgency of the symptoms, even a few hours were lost from trying a useless, and, as it happened, a dangerous expedient.¹¹

In December 1894 he reported three further operations which he had performed for "peritonitis due to trouble in the vermiform appendix".¹¹

Meanwhile George Adlington Syme, M.S. (Melb.), F.R.C.S. (Eng.), published *Notes on Two Cases of Appendicitis Where Operative Interference was Successful*.¹²

The first of Syme's two patients was appendicectomised on 29th August 1893, five months after Nolan's patient.

Perhaps it is only fair to comment that since Syme was a prominent surgeon and a teacher of considerable repute in the city of Melbourne, his case reports must have had a greater impact on the surgery of appendicitis in Australia than had Nolan's from Toowoomba. Nevertheless, Nolan was first.

In the Jackson Lecture which he delivered at a meeting of the Queensland Branch of the British Medical Association in September 1944 the late Dr. Alan Lee cited Nolan's report and went on to comment:¹³

"The gratification of Dr. Nolan would be greater if he could know, not only that his patient survived the operation for some months, but that she is still living and in good health 51 years after its performance.

"The operation first prescribed was not performed at a General Hospital, but on the kitchen table placed in the bedroom at the patient's home. Her own memory of the event is mainly of a lot of boiling water, a lot of carbolic and a lot of fuss".¹⁴

At the time when Dr. Lee gave his address, Miss Ella Tolmie, a nurse from the Toowoomba Hospital who assisted at the historic operation, was also still living.

Dr. Nolan's report contains several items of current medical interest such as lavage of the abdominal cavity, albeit with hot water, but this is no place for clinical discussion.

Nolan continued to practice in Toowoomba from his Russell Street address. In 1895 he was nominated by Dr. Freshney for membership of the Queensland Branch of the British Medical Association and duly elected.

In 1898 he volunteered for service in the Boer War and left Australia with the Second Contingent of the Queensland Mounted Infantry. His service in South Africa terminated when he was stricken with enteric (typhoid fever). He survived this illness, but it seems to have left his health permanently impaired and at the end of his convalescence he travelled to Europe.

During the next two years his time appears to have been spent visiting various clinics and studying rhinology and laryngology.

Russell Nolan returned to Australia in 1902 but not to Queensland. His parents were once again living in Sydney, where his father was preacher at Newtown for the third and last time in his 44 years of ministry. This may have influenced Nolan's choice, although he was now a fully trained specialist and required a capital city in which to practice his speciality.

He set up in Macquarie Street, the Harley Street of Sydney, as a Specialist in Diseases of the Nose and Throat and rapidly gained a large following.

In the year after his return he was appointed to the staff of the Royal Prince Alfred Hospital as Honorary Clinical Assistant Surgeon in the Department for Diseases of the Nose and Throat. Incidentally, Nolan was the **first** Clinical Assistant to be appointed to any department in that hospital.

Advancement soon came, and on the retirement of Dr. Hankin in 1906 he was promoted to Honorary Surgeon.

Meanwhile he had been appointed Lecturer in diseases of the ear, nose and throat at Sydney University.

In 1914 Nolan's health, which had been indifferent since his South African illness, deteriorated further. He continued to practice, but towards the latter part of the year reduced the work load by taking into partnership Dr. Alexander Dunn. At the very end of the year he retired permanently from practice and on 3 February 1915 he died.

Nolan had married and had three sons, all of whom were living at the time of his death.

This then is a thumb-nail sketch of the life of the Surgeon to whom goes the credit of having performed the first deliberate appendicectomy in Australia.

His obituary in the *Medical Journal of Australia* concludes with the words: "In his practice he was a man of resource, geniality and kindness. His knowledge of and technical skill in his specialty, coupled with his experience as a General Practitioner, rendered him more than usually capable in dealing with his patients He was essentially an optimist and his generosity in word and deed, and constant cheerfulness gained him the confidence and affection of his patients and friends".⁵

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14. op. cit (13) and personal communication from R.H.S.Q. member Dr. Derrick Yeates, F.R.C.S. (Eng.), F.R.A.C.S., whose mother was sister of the late Miss Ella Tolmie who later became matron of Toowoomba Hospital.