HISTORICAL ARTICLES

James H Nicoll, MB, CM Glasg, FRFPS Glasg. Legion of Honour France, Father of Day Surgery

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"From the grave ..... he speaketh" epitaph on J.H. Nicoll's tomb, The Necropolis, Glasgow. Hebrews 11 V4-16, (KJV).

The Reverend James Nicoll, MA, was born in Dundee in 1830. He studied at St. Andrews University, Free Church College Glasgow and New College Edinburgh. He was ordained at Alva in 1863 and then married the same year Margaret M. Mitchell. They had a son named James Henderson Nicoll on 30th September 1863. The Reverend translated to St. Enoch's in Glasgow the following year and then in 1868 to the Free St. Stephen's Church in Glasgow where he earned a reputation as a distinguished minister (a man of great personal charm and a gifted speaker). He was in post until his death in 1887.

The young Nicoll was educated at Glasgow Academy and then the University of Glasgow where he graduated MB.CMGlasg in 1886 at the age of 23. His first house jobs were under Sir. Hector Cameron and Dr. McColl Anderson in Glasgow. He decided early on he needed to broaden his experience and headed to the metropolis where for the next four years he undertook his surgical apprenticeship under Sir Frederick Treves in London. He developed a strong interest in urology which was to serve him later on in his surgical practice. Sir Frederick Treves was appointed Professor of Anatomy when Nicoll joined him and he became famous because he drained an appendix abscess for King Edward for which he received a knighthood. He is also renowned for being the physician who cared and befriended the much written about elephant man, Joseph Carey Merrick who had proteus syndrome. Nicoll as his Houseman would undoubtedly have cared and been in contact with Merrick and looked after him. It is very likely that the surgical skills were not the only ones that he learned from Sir Frederick Treves but also his humanitarian ones.

Nicoll had an insatiable desire and an innate drive to visit other centres and meet experts in his field of surgery His knowledge of surgical skills no doubt was far advanced for his time because he did not rely solely on his local experience or on book knowledge but sought out well known international figures of those days and visited and worked with them to gain first hand experience (he did this at his own expense). Following this period in London he then toured the continent and visited a variety of centres of excellence and is reported to have travelled as far as Moscow before returning to Glasgow. Nicoll returned to Glasgow brimming full of original ideas. He was first appointed as a Dispensary Surgeon to the Western Infirmary in 1891-1895. He rapidly gained recognition with this appointment both as an excellent surgeon, a teacher, a trainer and a prolific writer. He was renowned for his endoscopic skills in urology and developed an extensive private practice. Although his early interests were in the field of urology he soon extended this to a more general surgery and in particular to children's surgery.

"His surgical skill was matched by his soundness as a diagnostician and his judgement. As an operator he had courage and confidence working quickly and crisply". He developed the concept of a team working closely with the bacteriologist and pathologist submitting all specimens to microscopic examination. His skills as a genitourinary surgeon early on resulted in a modification of Lister's bougie and he was renown in Glasgow as an expert cystocopist. He decided to broaden his field as a general surgeon and on appointment to the Dispensary performed children's surgery. He was appointed as surgeon for diseases of the urinary organs and to the Central Dispensary when he decided that Day Surgery should be undertaken.

He was appointed by the Board of the Western Infirmary in 1896 as an Assistant Surgeon a post he held until 1905 when he was appointed Visiting Surgeon to the Infirmary and stayed in this post until 1917 when he resigned the post and departed for France for the war in August that year.

With the turmoil of the First World War, a large part of the Sick Children's Hospital was commandeered by the Military Authorities and only a small part was allowed to function as a children's hospital. (Although Nicoll resigned his post in 1914, he continued to assist and care for the children during these difficult times until he was dispatched to France in 1917.) This state of affairs continued until 1920.

Anderson's College

Anderson's University had four Faculties, Arts, Medicine, Law and Theology. It was bequeathed by John Anderson (1726-1796) in his Will and the Medical School was founded in 1800. James Nicoll was appointed Professor of Surgery to the College in 1903 until 1908 when he became the Surgeon at the Western Infirmary. It is reported that his classes were very popular and attended by a large number of keen medical students who benefited from his precise, lucid, dogmatic lectures. Besides his clear brilliant lectures on surgery and operative surgery he was renowned for new methods to illustrate his lectures. He spent considerable effort and his own money on delivering and using very innovative technology at that time, lantern slides and illustrations to produce brilliant talks. He was a recognised artist in the illustrated lecture and was respected by all his students for this.

Nicoll and the "Glasgow Dispensary"

The Glasgow Dispensary opened in October 1888. Over 7 decades the "Dispensary" as it was fondly known was an outpatients Department in West Graham Street. It treated a total of 750,000 patients who attended, a total of 2.7 million attendances. .

By the time Nicoll returned to Glasgow the Hospital for Sick Children had been granted its royal title and the outpatient department at West Graham Street was open. It was here that Nicoll decided to make his mark and practice his skills as a surgeon. He adapted this place to his needs. He persuaded the Glasgow Sick Children's Board to convert an "old sewing room" into an operating theatre for him to do his "Day Surgery". On the 9th July 1895 Nicoll donated a sum of money to buy a number of sterilising apparatus for the Dispensary. He never made any fuss about his donations nor did he seek any publicity.

His lifetime of work at the Dispensary earned him the title of "The Father of Day Surgery"

He was appointed as an extra honorary surgeon to the Dispensary in 1894 and remained in post until 1914. He refused an offer to become "Visiting Surgeon" to the Royal Hospital for Sick Children in Scott Street and then Yorkhill because of regulations of the Children's Board and because of his dedication to the outpatient care at West Graham Street. (When the new Children's Hospital moved to Yorkhill the clinical staff had to devote their full time to children's work). He was eventually given the title of Honorary Consultant Surgeon in recognition of his work and elected Director of the "Dispensary" on 22nd December 1920. He accepted this office on 10th January 1921 but died seven months later.

Nicoll the Surgeon

From 1891-1914 he was Surgeon to the Dispensary. The workload at the Dispensary was enormous and Nicoll's report published that between 1899 and 1908, 8988 operations were performed in this "Day Centre" and he personally had done 7392 of them. From Annual Reports of those times 17,833 operations were performed under anaesthesia in the first decade of the twentieth century.

It is reported that he operated on infants and children with cleft lip and cleft palate and other conditions like mastoid empyema, spina bifida, fractured skull and hypertrophic pyloric stenosis. Nicoll was the forerunner of the paediatric surgeons in the West of Scotland. His paper in the BMJ in 1900 on the treatment of pyloric stenosis and subsequently his report of a series of patients in the Medical Journal showed that Nicoll was well ahead of his time in performing successful operations for this condition.

Spina bifida and Day Surgery

Spina bifida was another area in which Nicoll was active. In 1902 Nicoll wrote, **"On reviewing an extensive list of cases with spina bifida, hydrocephalus and hydro-encephocele treated by operation in hospital and private practice I am convinced of a growing belief that infants fare at least as well in the care of their mothers as in the ward of a hospital".** In this article he stated very clearly that Day Case surgery was beneficial.

The resignation of Nicoll in 1914 was because the First World War broke out and Nicoll volunteered to continue to assist at the Sick Children's Hospital which had been considerably upset as a large part of the hospital was commandeered and used by the military and only a small part allowed to function as a children's hospital. Normality ultimately returned in 1920 when the children's hospital became fully functional as a children's unit. Nicoll continued to work in the Sick Children's Hospital from 1914 to 1917 when he was dispatched to France but soon returned later that year due to having contracted dysentery and ill health ensuring as a result of this.

Nicoll the Academic

He published 101 papers, a prolific writer and audited his work. He was an original thinker and published his views on a number of ideas. He published in the BMJ and the Glasgow Medical Journal as well as contributing many case reports to the Royal Medical Chirurgical Society of Glasgow. In 1900 he published the first successful operation for pyloric stenosis (a full 12 years before Ramstead reported his operation for pyloromyotomy). In 1906 in the Glasgow Medical Journal a predecessor of the Scottish medical Journal he reported his series of patients treated for this condition.

The domiciliary nursing service

The domiciliary nursing service that had been started in 1888 was supported very vigorously by Nicoll and the system of nurses visiting and checking the patients post-operatively was a vital part to allow him to operate in the Dispensary. He took an active part in teaching the nurses and ensuring that they looked after his patients properly. These Sisters and Nurses often gave help and support to families as well as caring for the post-operative needs of the patients. It is notable that Nicoll supported this service financially. In the Minutes of the Board Meeting a disagreement between Nicoll and the Board was recorded. Nicoll rented a house close to his work where patients and their families could be kept temporarily post-operatively for nursing staff to care for them before they departed often long distances to get to their homes. He had established the "House Hotel" for his patients. He organised a body of outdoor visiting nurses, who were devotedly attached to this work.

As a result of Nicoll's extensive Day Surgery practice he enunciated his conclusions in the BMJ on 18th September 1909 where he stated

Much surgery done in hospital was a waste of resources! The cost of Day Case surgery was one tenth of inpatients.
The concept of bed rest was impractical in children. An unnecessary but careful selection was needed for Day Case surgery.

Nursing Sisters were employed to visit children at home.
Separation of the child from the mother was harmful and Day

Case surgery minimised this.
Turn over of patients in Day Case surgery was more rapid by reducing the anaesthetic time.

Nicoll the man and the politician

He was an eager connoisseur in art and was a contemporary of Sir David Young Cameron (1865-1945), the landscape artist and etcher. He was the owner of a large art collection which included many of Cameron's landscapes, and etchings by Whistler as well as a fine collection of paintings by Hornel. He was popular in all circles (1904-1913). He was a man of charm and grace, liked by all his colleagues medical and nursing alike "children were devoted to him and he to them". He never married, remaining a bachelor till the end. He was a successful accomplished surgeon, a great teacher, innovator but most of all was known in all circles as a "forebearing, tactful and kindly friend. "A great philanthropist". He never took long holidays but settled for weekends with close friends of his. He enjoyed walking in the countryside and was knowledgeable about nature. His other passion was art and was a member of the Glasgow Art Club.

In 1911 he was appointed a Justice of the Peace for the County and the City of Glasgow (Ref. BMJ 1911, Vol 2, 11 77). He was also appointed as Secretary of the West of Scotland Board of the BMA for years was the Vice President of the Section of Surgery at BMA meetings.

The Cross of the Legion of Honour

In 1915 the Minutes of the University Court recorded the intimation from the French Ambassador in London that President Poincare Rector of the University had nominated Marshall James H. Nicoll as his assessor on the University Court. Nicoll served for the next five years. In 1920, the Minutes of the Court recorded a cordial congratulations to Nicoll on hearing that he had been conferred with the title of the Cross of the Legion of Honour.

Formal recognition of his excellence as a teacher and academic was recorded in the Minutes of the University Court in 1915. Another vignette in Nicoll's life is connected with the Minutes of the University Court that he had donated £5000 to establish a Lectureship in collaboration with the Western Infirmary. Whether this was a personal gift or one by benefactors no one will know but he often made donations in his life time and made little demonstration about it which reflected some of his reticence and his West of Scotland upbringing.

While he was serving in France during 1918 he contracted dysentery which caused prolonged ill health. He was very popular and his early death made a deep impression on the whole community in Glasgow but most of all on the medical professions 15th August, Glasgow Medical Journal 1921 at 11hrs 15m at his home in 4 Woodside Place. He was only 56 years old.

Conclusion

James Nicoll, a Glasgow surgeon, was making significant contributions over a hundred years ago to the advancement of medicine and surgical knowledge.

As a Paediatric Surgeon he was a forerunner of the West of Scotland tradition of Paediatric Surgeons.

As an educationalist he was ahead of his time in illustrating his lectures which were greatly admired and attended by medical students and nursing students in Glasgow.

He spared no expense to use the latest technology of the time to make his talks artistic and interesting.

As a pioneer in surgical innovation he acquired skills and ideas from his enthusiastic visits abroad earlier in his career and reported on these widely.

He was a medical politician and clashed with authorities on a number of occasions in his zeal to develop and help the nursing profession and develop his ideas of Day Surgery which were completely contrary to the established practice at the time.

As a scientist he was a great observer. He contributed and documented his excellent results - a tribute to his skills, hard work and prolific operations and his ultimate aim to give the best care for his patients.

The main reason why Nicoll should be remembered today is for his advocacy in the practice of Day Surgery.

In 1944 his sister-in-law bequest £1000 to the Royal Hospital for Sick Children to commemorate the name of J.H. Nicoll called the James H. Nicoll Nurses Fund. It was set up to award each nurse who completed her training to get a bronze medal and a gilt and silver medal were awarded to the best two nurses of the year.

His tombstone in the Necropolis overlooking his beloved City and its people has the following words inscribed "From the grave .... He speaketh". Hebrews 11 V4 - a fitting epitaph for such a great man who has to be admired for his work and contribution – in his life he never sought fame.

Figure 1 - Honours and Achievements

1894	Dispensary Surgeon
1903	Professor of Surgery
1903	Fellow of the Royal Faculty of Physicians and Surgeons
1911	Justice of the Peace for County and City of Glasgow
1915	Assessor of the University Court
1920	Cross of the Legion of Honour, France
1921	Director of the Royal Hospital for Sick Children

Selected Bibliography – See website **www.smj.org.uk**