

David Alexander Draffin: An Irish ENT Surgeon and Inventor

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Key words: Draffin, Draffin rods, Tonsillectomy, History of Medicine, Otolaryngology

ABSTRACT

David Alexander Draffin was an Irish ENT surgeon and inventor of the internationally famous ENT instrument used in tonsillectomy, which carries his name and is called Draffin's rods. His story is not as well-known as his eponymous ENT instrument and this article attempts to shed a light into his life. He studied in Queen's University in Belfast and was a medical officer in World War II. During that time, he demonstrated great courage and spirit. On his return from the war, he worked in many hospitals as an ENT surgeon and published multiple articles. His career was an unconventional one though, since due to multiple extracurricular activities he never became a consultant! He was actually struck off the medical register for drink-driving charges just a little before his early death. His life was evidence of his bravery, innovative spirit and mischief and his legacy shaped the way tonsillectomies are done to this day.

MEDICAL LEGACY

Tonsillectomy is one of the oldest operations performed, dating back at least 2000 years ago. Celsus in Rome described for the first-time tonsillectomy surgeries in the first century B.C.¹ The surgical techniques and the instruments used have changed greatly over the years, but tonsillectomy remains one of the most popular operations. In the United Kingdom, tonsillectomy is the fifth commonest procedure performed across all specialties, with an annual number of 50,846.²

The pioneering invention of Draffin rods by the Irish otolaryngologist David Alexander Draffin changed tonsillectomy practice advancing its safety and efficacy. Despite the ongoing debate regarding the best tonsillectomy technique, most of the traditional surgical approaches require the patient to be in the same "Rose position", with the head and neck extended, and the use of a mouthgag, to keep the mouth open. One of the fundamental tonsillectomy instruments used to secure this position is the Draffin bipod.¹ In 1951, Draffin published an article introducing his method to suspend the Boyle-Davis gag used to keep the mouth open during tonsillectomy by utilizing two rods or a bipod. The two rods created a tent-like framework by standing like two poles in the sterile towels in each side of the patient's head and meeting at the "free end" of the mouthgag. He explained

the advantages of this new device, which included easy and timely application, practical re-adjustment, good ergonomics and safe to use in dental anatomical variations.³ Before this invention, the Boyle-Davis gag was supported manually by the anaesthetic team. This had obvious disadvantages as it increased significantly the anaesthetic workload and was distracting for the operating surgeon. The anaesthetists had to have impossible multitasking abilities, as they had to secure the mouthgag while monitoring the patient's observations and depth of anaesthesia! For that reason, Draffin dedicated his invention "to the weary hands of cooperative anaesthetists and nurses". Previous attempts to stabilise the Boyle-Davis gag with other methods included complicated and impractical structures, like ropes hanging from the ceiling and supporting bars pressing on patient's chest! Draffin's idea was received with great enthusiasm internationally and was widely adopted. Draffin rods have remained part of the basic equipment for tonsillectomy ever since.⁴

EARLY LIFE AND MEDICAL EDUCATION

Alexander David Draffin was born on the 31st of August in Ballybeg, Co Monaghan, Ireland.⁵ He came from a large family and his father, a farmer also called Alexander, died aged 90 in 1951. His mother was Sarah Ann Draffin, who died in 1965, aged 85 in the United States of America (USA).⁶ He had five brothers and four sisters. The youngest of his siblings, Walter Draffin, died only recently in 2017, in the USA.⁷

Alexander David Draffin attended local school in Co Monaghan. He then commenced his medical degree in 1934 at QUB, graduating in 1939 with Bachelor of Medicine, Bachelor of Surgery, Bachelor of Obstetrics.⁵ During his university studies, Draffin was well known for his athletic abilities and was an active member of the Belfast Athletic Club.

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Figure 1. Photo of Draffin rods.

Obtained from the surgical equipment used in theatre by our team in November 2019.

SERVICE IN THE ROYAL ARMY MEDICAL CORPS

In December 1939, shortly after his graduation from University, he volunteered for the army and became an emergency commissioned officer in the Royal Army Medical Corps. He was immediately sent to France and Belgium and was the youngest person to serve as a regimental medical officer with the British Expeditionary Force.⁸ During his time there, he experienced some of the most gruesome events of the war. He was part of the 2nd Royal Norfolk Regiment, which was involved in the famous war crime committed in La Paradis. In this event, German troops massacred 97 British soldiers and amongst them were 26 of Draffin's fellow officers. Thankfully, he managed to avoid captivity at that time; but his luck did not last for long. He was eventually captured and remained under German imprisonment for most of the war. However, he was troublesome to his captors, even as a prisoner. He was notorious for multiple escape attempts



Figure 2. Photo of the Queen's University Belfast Athletic Club in 1936. David Alexander Draffin is the first on the right on the front row. Permission for publication obtained from Queen's University of Belfast Special Collections and Archives.

and acts of rebellion. Due to this behaviour, he was transferred to many different camps. Because of that, the question 'Did you meet Draffin in your travels?' became a way to confirm the authenticity of a new prisoner. At one camp he managed to save 90 of his fellow prisoners during one of his escape plans. Unfortunately, he was wounded and captured before he escaped. His constant efforts to escape resulted in multiple terms of solitary confinement and camp transfers, but when these measures failed to faze him, he was transferred to the notorious Colditz Castle. He remained there from August 1943 until September 1944. This castle was well known as a prisoner-of-war camp during World War II for "incurable" Allied officers who had numerous previous escape attempts. Some of the most notable of Draffin's fellow prisoners include Sir Douglas Bader and Sir Airey Neave. Draffin continued his escape attempts even while in Colditz Castle, but he never succeeded in escaping from the Germans. He finally managed to escape captivity, only after the Russians had taken over from the Germans. His last escape was as eventful as the rest of his imprisonment. Before he escaped, he saved the six German nurses with a smart move. He asked them to hide in the cellar and he wrote in the door 'Typhus Ward – Keep Out' in German, Russian and English! Because of his distrust to the Russian army, he swam all the way across river Elbe to the American Second Army to ensure his liberation.⁴ As recognition for his service in the war he was awarded the King's Badge for Loyal Service.⁸

LIFE AFTER THE ARMY

It is thought that Draffin's traumatic experiences during the war made his transition to civilian life difficult. He married Margaret R Lyle in July 1948, in Newcastle upon Tyne. In the same year he obtained the Diploma of Laryngology and Otology and started working as an otolaryngologist. It seems that he did not settle in one place, but rather moved around. He worked in various hospitals, including the Hospital of St Cross, Manor Hospital, Nuneaton and George Elliot Hospital, and South East Kent Hospital Group.⁸ He was also active academically and published several medical articles with international citations. He published about his eponymous invention in 1951 in British Medical Journal. His method was a complete success and became popular practice around the world. He had other articles published in the Journal of Laryngology and Otology (JLO).⁹

Despite his active career in clinical practise and research, he never passed the exams for the Fellowship of the Royal Colleges of Surgeons and therefore he was never officially a consultant. That might be because he was distracted by his several extracurricular activities. He was a very successful businessman and was involved in real estate dealings. He owned a block of flats with significant rent income that allowed him to live a luxurious lifestyle, which included the purchase of two Rolls-Royces.⁴

His lifestyle may have contributed to his demise - he was summoned to appear before the General Medical Council (GMC) following several incidents involving driving under

the influence of alcohol. The first disciplinary committee meeting took place in 1964 and Draffin was given the opportunity to overcome his alcohol problems by postponing judgement for two years. His careless behaviour however continued. He failed to appear at one of the GMC hearings because he claimed that he was too busy reading about the fall of the Roman Empire! Following the final meeting at the beginning of March 1967, Draffin was struck off the medical register.¹⁰⁻¹³ Shortly after, on the 30th of March 1967, he was found dead in his flat in West Kensington in London.⁴ There are several rumours regarding the cause of his death, some of them claiming mischief was involved. However, the post-mortem that was conducted confirmed that the cause of his death was myocardial infarction.⁴

CONCLUSION

Draffin was a daring and unique ENT surgeon with a fascinating life, who is mostly remembered for his inventions in Otolaryngology. He came from a simple background but went on to lead a colourful and adventurous life. During the war he demonstrated his courage, persistence and altruism by saving almost 100 people and attempting multiple escapes from captivity. After the war, his medical career was unconventional. He was an experienced otolaryngologist, but never actually passed his FRCS exams. He was a skilful surgeon, a practical inventor and his eponymous rods are used until today internationally for tonsillectomy. He was also an accomplished businessman and became financially successful. His carefree lifestyle led to controversial life choices and he died at a young age. However, his legacy lives on through his invention and his name is heard daily in the ENT theatres around the world.

ACKNOWLEDGEMENTS

Special thanks to Ursula Mitchel and Christopher Whiteside for accessing relevant documents in the Archive Room at the Queen's University in Belfast. Also, special thanks to Louise Neilson for accessing the General Medical Council minutes held at the Lothian Health Services Archive.

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