## Medical History

# Ulster connections with Nelson and Trafalgar

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Last year brought the two hundredth anniversary of the battle of Trafalgar and it is a good time to remember Ulster's strong connection with the Royal Navy over the centuries. We can identify some 200 Ulster doctors who qualified before 1900 and served in the Navy,<sup>1</sup> though this may well be an underestimate, for it is hard to produce a complete list to compare with the approximately 260 who served in the Army Medical Service<sup>2</sup> and about 100 who served in the Indian Medical Service<sup>3</sup> over the same period. There are excellent annotated rolls for these two services, while no biographical list exists for the surgeons of the Royal Navy and names have been obtained from Medical Directories and scattered earlier sources.

Until about 1850 most of those joining the Naval Medical Service did not have a medical qualification, but took a course of training and an examination set by the Surgeons' Company of London.<sup>4</sup> They would then join a ship as surgeon's mate or assistant surgeon, moving from ship to ship over their career, with often a posting on shore as physician to a hospital when they were more senior. On the other hand many served for only a few years, to retire early and move into general or hospital practice (for example Dr Samuel Browne (1809-90), attending surgeon to the Belfast General Hospital and the father of ophthalmic surgery in Belfast<sup>5</sup>). Often they only took a medical qualification in mid-career or on retirement from the Service and at this stage no further formal period of study might be necessary. Later in the nineteenth century recruitment was as it is now, from fully qualified doctors and the progression included the rank of staff surgeon, known from 1875 as fleet surgeon.

Two surgeons from this group are of special interest now because they served with Nelson on the *Victory* and wrote detailed letters and diaries of their experiences there. Both have been the subject

of biographical articles, published some fifty and ninety years ago and Dr R.S. Allison, neurologist and medical historian,<sup>6</sup> collected material on both, although he never published anything on them.

### **LEONARD GILLESPIE**

Leonard Gillespie (*fig 1*) was born at Armagh on 20 May 1758, son of Leonard Gillespie and Elizabeth Blakely.<sup>7</sup> His parents died when he was a child and he was brought up by his two elder sisters until he was apprenticed at the age of fourteen to a doctor



*Fig 1.* Leonard Gillespie, MD, RN. (from the portrait by Charles Louis Bazin)

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in Armagh. Five years later he went to Dublin where he studied for a year under various surgeons. (The Royal College of Surgeons did not receive its charter until 1784<sup>8</sup>). In June 1777 he attended a court of examiners of the Company of Surgeons in London and having satisfied them, was passed into the Royal Navy, to become second assistant surgeon on HMS Royal Oak. In this period he saw a lot of the slave coast of West Africa and made journeys to and around the West Indies, guarding merchant ships and in March 1779 heard the guns in General Washington's camp firing to celebrate the third anniversary of the Declaration of Independence. He was promoted to surgeon in 1781. The duties of the surgeon, of course, rarely involved operative surgery and both at sea and in the hospital of St Lucia, he took a particular interest in leg ulcers. These were caused by abrasions, dirt and damp, and healing was impeded by scurvy.

The peace of Versailles in 1783 saw Gillespie discharged from the Navy, with a considerable sum of prize money, and he took the opportunity to study medicine further in Edinburgh, St Andrews and Paris for two years before returning home to see his sisters. Those in Armagh advised him to practise at home, as was common with naval surgeons after a war was over, but he found the country life too narrow compared with that of London and Paris, and boredom soon set in. Within a year he was in London enjoying both the intellectual and medical stimulation, and by 1787 he was back at sea. As a humane and cultured man he deplored the pressgang methods, the drunkenness, hangings and floggings, and the constant recourse to prostitutes who made treatment of venereal disease one of his main concerns. Over the next few years society at sea must have been even narrower than in Armagh, but he took every opportunity, when his ship berthed in Edinburgh or London, to attend lectures and cultural gatherings. His ship put in at Le Havre in January 1791 and he took prolonged leave to visit Paris again and to attend the wards of the hospitals until the situation worsened with the execution of Louis XVI.

War was declared between England and France on 1 February 1793 and he rejoined the Navy on board HMS *Majestic*, taking part in Lord Howe's victory on the Glorious First of June 1794. As we have seen, surgeons' problems were often matters of health and nutrition, and he records that after the victory they took on board two hundred French prisoners, suffering from typhus fever and scurvy. The fever soon spread to his own ship's company and eventually sixty-eight men had to be sent to hospital. For the next eight years the Majestic was stationed in and around Martinique in the West Indies, where he gained even more experience of disease, particularly yellow fever. In this period he also wrote two books on tropical diseases and was granted the degree of MD by St Andrews University, on the recommendation of a London friend, Dr James Sims (formerly from county Tyrone). He also formed a lasting relationship with a local woman, Caroline Heiliger, by whom he had two children, as well as writing frequently to his sisters in Armagh and investing his large sums of prize money. Gillespie left detailed journals of his stay in Martinique which are full of concern for the welfare of the negro slaves, the treatment of prisoners and the spiritual and moral welfare of the British soldiers and sailors.

The peace of Amiens in 1802 allowed him to return home again, but he realised that war was likely to be resumed soon. In 1804 he rejoined the Navy, being promoted to the advisory role of physician and Inspector of the Naval Hospitals in the Mediterranean. This brought him into close contact with Nelson for the first time. Both were of the same age and both held similar humanitarian views on the health and welfare of the sailors and the evils brought on by rum in particular. He joined the *Victory* in January 1805 and grew to share the general admiration felt by all for their leader.

One typical day in the Mediterranean he recalled in a letter to his sister Jane, written between January and March 1805. His servant woke him at 6.00 am with a light and a weather report, after which he dressed and went on deck to watch the dawn, then joining Lord Nelson, Rear Admiral Murray, Captain Hardy and others at breakfast. This was followed by a day of study, writing and exercise, visiting the sick berth only when asked by the surgeon. There was a band performance at two o'clock, followed by an excellent dinner with the best wines, for the officers at least. This was followed by more band music and after tea, Gillespie wrote, "Nelson generally unbends himself, though he is at all times as free from stiffness and pomp as a regard to proper dignity will admit, and is very communicative. At eight o'clock a rummer of punch with cake or biscuit is served up, soon after which we wish the Admiral a good night (who is generally in bed before nine o'clock)". This was too early for

Gillespie, who would then read for an hour or join old friends in the ward room.

Much of 1805 was spent in fruitless chase of the French fleet which, perhaps wisely, kept retiring to the safety of port. On August 18, when the Victory was anchored off Spithead, Gillespie resigned and was granted prolonged leave to go to London. It is surprising that he should have done so at this time, but it seems that he felt that his own health was not good and, fearing a major battle, he did not relish the brutal surgery which would inevitably accompany this. He also thought that he had persuaded the Admiral to rest more now and look after himself, though Nelson notoriously paid little heed to medical opinions and was in vigorous mental and physical health for the battle of Trafalgar in October. In the autumn Gillespie went to the spa at Cheltenham but was well enough to attend Nelson's funeral at St Paul's Cathedral on the ninth January 1806. He held no more naval appointments and retired on half-pay in 1809. After the peace of 1815 he returned to Paris which, in spite of twenty years of war, he had come to regard as his home. His portrait was painted in Paris by Charles Louis Bazin in 1837 and through the window in the background HMS *Victory* is proudly shown. He died in London on 13 January 1842 at the age of 84 but was buried in the Pere Lachaise Cemetery in Paris.

## SIR WILLIAM BEATTY

The other distinguished naval surgeon was Sir William Beatty (fig 2), remembered now for having attended Lord Nelson during the battle of Trafalgar. Beatty was born c. 1773, the oldest of six children of James Beatty of HM Customs in Londonderry, and Ann Smyth.9 Two brothers and a brother-inlaw had naval connections, which is not surprising considering the importance of Londonderry as a port and the progress of the Napoleonic Wars as they were growing up. William seems to have been educated locally and was trained by apprenticeship as a surgeon's mate. It is evident from his Journal that he also must have had some practical instruction in anatomy. He is first recorded as surgeon to HMS Flying Fish in 1793, with subsequent appointments to HMS Alligator, HMS Amethyst, HMS Alcmena, HMS Resistance, and HMS Spenser. He was appointed surgeon to HMS Victory on 14 December 1804, replacing George Magrath, another Ulster surgeon, and had two surgeons under him, as well as a third transferred to the ship on the evening of



Fig 2. Sir William Beatty, MD, RN. (from the original portrait)

the battle of Trafalgar, 21 October 1805, to deal with the heavy casualties.

Beatty has left records of his patients in his Journal, preserved in the Public Record Office, Kew. There was, of course, no physician on board the *Victory*, and Beatty records five deaths in the ten months before the battle, of which three were due to consumption, one to fever and one to injury. As a result of the battle there were about 55 killed immediately, together with 102 wounded, of whom 7 died. Beatty and his team seem to have treated all the wounded, although five of the worst were left behind at Gibraltar and five others were later transferred to the hospital ship Sussex, lying off Sheerness.

As well as the manuscript Journal, Beatty published an "Authentic Narrative on the death of Lord Nelson: with the circumstances preceding, attending and subsequent to that event; the Professional Report of His Lordship's wound and several interesting anecdotes .....". This gives a graphic picture of the day of the battle and we feel we can re-create the whole scene of Nelson's wounding and death. The Admiral was in good

spirits on the morning of the 21st October and confident of victory. Contrary to advice, he insisted on dressing up in his uniform coat, which had all his orders and decorations conspicuously displayed. The French ship *Redoutable* was very close, with a sniper posted high up on the mizen-top only 15 yards from the quarter-deck of the Victory. Nelson was an easy and identifiable target, so a sniper was able to take steady and fatal aim. Two snipers were immediately shot from Nelson's ship but Nelson was already mortally wounded. As Beatty wrote later "The ball struck the forepart of his Lordship's epaulette, and entered the left shoulder immediately below the processus acromion scapulae, which is slightly fractured. It then descended obliquely into the thorax, fracturing the second and third ribs; and, after penetrating the left lobe of the lungs, and dividing in its passage a large branch of the pulmonary artery, it entered the left side of the spine between the sixth and seventh dorsal vertebrae, fractured the left transverse process of the sixth dorsal vertebra, wounded the medulla spinalis, and fracturing the right transverse process of the seventh vertebra, made its way from the right side of the spine, directing its course through the muscles of the back and lodged therein about two inches below the inferior angle of the right scapula. On removing the ball a portion of the gold lace and pad of the epaulette, together with a small piece of his Lordship's coat, was found firmly attached to it".

All this information was, of course, not available at the time of injury. When Nelson had been carried below and was being examined, he said "Ah, Mr Beatty, you can do nothing for me, I have been shot through the spine." He knew the symptoms of paraplegia since Beatty had explained them in the case of a boy in the crew who had been similarly injured a few days earlier. Nelson had severe bleeding and suffered greatly from thirst, but no treatment was possible and he died two and threequarter hours later.

Nelson specifically asked for his body not to be thrown overboard but buried in St Paul's Cathedral, if the people wished it. Beatty, therefore had the task of preserving the body. This was undertaken by immersing it in the largest cask that could be found, surrounded by brandy – a procedure which was successful for all but the intestines, which did decompose and had to be removed when he carried out a full post mortem examination in Spithead. The body was eventually taken by sea to Greenwich, where it lay in state for three days before the state funeral to St Paul's. The bullet was retained by Beatty, mounted in crystal and subsequently passed from his family to Queen Victoria who had it placed in the Armoury, Windsor Castle. The bullet and Nelson's naval coat have been reunited in an exhibition during 2005 in the National Maritime Museum to commemorate the battle.

After the war Beatty took the MD of St Andrews in 1817, followed by the LRCP London in the same year. He was elected a Fellow of the Royal Society in 1818. He was appointed resident physician to Greenwich Hospital in 1822, and remained on its staff until his retirement in 1839. William IV, who always took a great interest in naval matters, conferred a knighthood on him in 1831. He never married and spent his last years in London, dying at 43 York Street, Portman Square on 25 March 1842, to be buried in Kensal Green Cemetery (where there is sadly no memorial).

Many other Ulstermen served as naval surgeons during the 18th and early 19th centuries. These included David McBride (1726-1778) who obstinately recommended malt for the prevention of scurvy, even after it had been superseded by James Lind's lemon juice. He was subsequently one of the founding surgeons of the Meath Hospital, Dublin.<sup>10,11</sup> There were also Richard McClelland (c. 1761-1807), one of the founding surgeons of the Belfast Dispensary in 1792, Andrew Marshall (1779-1868) who was attending surgeon to the Belfast Fever Hospital 1807-28, and David Moore (1780-1849) who had been appointed surgeon in the navy by Lord Nelson in 1803 and was attending surgeon to the Fever Hospital 1821-45.12 Sir George Magrath (1775-1857) was a flag medical officer to Lord Nelson before Sir William Beatty, as we have seen, and was awarded the KCB by his former shipmate, King William IV in 1831.<sup>13</sup> James Johnson (1777-1845) was a more eccentric shipmate of the King, who also served in the Napoleonic wars, but is more famous as a medical writer and for a prolonged lawsuit with Thomas Wakley of *The Lancet*, resulting in his having to pay damages of £100 to Wakley.<sup>14</sup> Finally, we may mention Sir James Prior (c. 1790-1869) who was present at the surrender of Heligoland in 1814 and of Napoleon himself in 1815.15

This list only covers some of the more celebrated surgeons, but in many of the small dispensaries

throughout the British Isles there would have been surgeons who had trained in the Royal Navy during these wars. Fortunately for the patient, a surgeon could acquire more surgical experience during one naval battle than he would require during the remainder of his life.

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Firstly, you and your lawyers can look at the validity of the exam. If you pass the exam does that mean that that you're ready to work as a doctor? If you fail does that mean that you're not ready? If the answer to either of these questions is no then you may have a case. For example, if many of the questions in the final medical exam test knowledge of basic sciences then the exam may not be a valid test. A doctor may not know the ins and outs of the Krebs cycle, but he or she may still be able to give sensible and evidence based dietary advice to patients. And what about reliability? Test-retest reliability is a good place to start. How many students who passed their final exams in May would still pass them if they were taken again in September? If large numbers of your students would fail in September, then your exam is not reliable and your students are probably crammers.

So if you are setting an exam, how do you avoid these pitfalls? Firstly, make sure that the exam tests what it's supposed to test. If it is a test of whether candidates would make good general physicians then ensure that the questions deal with common medical problems that would be seen on an average take. So most of the questions should be on chronic bronchitis rather than porphyria, and they should test candidates' knowledge of the diagnosis and treatment of chronic bronchitis rather than its pathophysiology or epidemiology. And if you want to stop the crammers concentrate on continual assessment rather than a single high-stakes exam at the end. It is strange that some people are calling for doctors to do an exam to stay on the medical register when universities are increasingly realising that the best way of deciding who should get on the register is by regular assessment.

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