Aberdeen

After the second world war the neurosurgery unit in Aberdeen was opened in 1948. The first surgeon was Mr Martin Nichols. He had been sent to France in 1940 with a mobile neurosurgery unit but was taken prisoner of war and spent the rest of the war in Stalag Luft 1 where he served as the camp surgeon. He brought modern neurosurgery to the North East of Scotland and opened clinics in Inverness and Dundee. The new department was staffed by nurses who became specialists in the care of patients with neurological illnesses or in neurosurgical operating theatre nursing. They included Marjory Hogg, Maggie Thomson, Lesley Russell, Ros Grant and Betty Beaton â€“ all pioneers of a new branch of nursing.

The next neurosurgeon Mr Bob Fraser who also had war time surgical experience in North Africa was appointed in the 1950s.

The first neurologist, Allan Downie was appointed in 1965. In this period, before the C.T. scan, imaging of the nervous system was complicated, unpleasant and dangerous. The first neuroradiologist was Dr Sandy Macdonald.

The second neurologist was, Dr John Hern was appointed in the 1970s and Mr Chris Blaiklock succeeded Mr Fraser. The first C.T. scan (EMI scan) was installed in the 1970s along with the operating microscope and the world's first clinical MRI scanner.

Until the 1980s, the Intensive Care Unit for the hospital was in the neurosurgery unit and ventilated patients were looked after by the neurosurgery nurses and the neurosurgeons. In the 1990s the number of surgeons increased to 3 and in 2008 to 4. In the last 20 years the unit developed steadily with the appointment of a neurophysiologist, specialist nurse practitioners, advances in neuropathology and up-to-date CT, MRI and PET scanners.

Functional MRI and the PET scanner enabled , before other units in Scotland, to identify areas of the brain responsible for particular functions in order to reduce the risk of brain surgery The operating theatre acquired a neuronavigation system, neurophysiology monitoring and up-to-date equipment for complex spinal surgery. In 2010 the first awake surgery was carried out for brain tumours.

When the new Royal Aberdeen Childrens' Hospital was opened it had an operating theatre fully equipped for paediatric neurosurgery.In the decade after 2000 multidisciplinary teams were formed to share responsibility for areas of neurosurgery including the treatment of brain tumours, spinal surgery, pituitary surgery and skull base surgery. The brain tumour team meetings include the oncologist in Inverness by videoconferencing.

Other important members of staff contributed to the success of the department, including medical secretaries, therapists, radiographers, receptionists, ward housekeepers, neurophysiology technicians, neuropathologists and anaesthetists. Many of these gave long, loyal service to neurosurgery in the North of Scotland.

Aberdeen has made a strong contribution to the training of neurosurgeons. In the 1990s a rotational training post was established with Edinburgh and trainee neurosurgeons spend time in both centres. All previous trainees have gone on to consultant posts in Aberdeen or elsewhere.

Neurosurgery in Aberdeen has always attracted generous support from the community. Many of our recent developments and investment in new equipment has been made possible by the unselfish kindness of our citizens.

There have been 11 neurosurgeons since the appointment of Martin Nichols. The neurosurgeons now subspecialise in aspects of neurosurgery. In the 1990s there were moves to centralise Scottish neurosurgery in the central belt. After a prolonged consultation and with strong local support the Health Secretary concluded that neurosurgery should remain in 4 centres that would work together as a single service.

No published guidelines exist for how receiving unit doctors should manage referrals. Feedback regarding the quality of neurosurgical referral handling in the hospital has, in the past, been poor. Gulsin et al. designed a novel means to appraise specialist referral handling, such that service delivery could be improved. They also aimed to identify differences, if any, between doctor perceptions versus actual satisfaction with the on-call neurosurgery service in the centre.

They first distributed questionnaires to gauge doctors' perceptions of our neurosurgery on-call service ('Perceptions of Neurosurgery Service' or 'PONS' questionnaire). Next they distributed a novel quality-of-service questionnaire ('Neurosurgery Service Assessment Questionnaire' or 'NSAQ') to all referring doctors over the three-month period between 01 March 2014 and 01 June 2014.

Of the 57 respondents to the PONS questionnaire, 47.3% perceived the neurosurgical referral service to be 'poor' (36.8%, n = 21) or 'very poor' (10.5%, n = 6). Next the NSAQ was sent via email to the referring doctor of each of the 502 referrals received in the study period. A total of 52 responses were received by referring doctors (response rate = 10.36%). Actual referral handling ratings were overwhelmingly positive; 82.7% rated the handling of their referral as 'good' (21.2%, n = 11), 'very good' (32.7%, n = 17) or 'excellent' (28.9%, n = 15).

Gulsin et al. describe a novel method for receiving units to appraise their referral services and demonstrate its usefulness in the tertiary neurosurgical unit. They also demonstrate that most referring doctors are satisfied with the handling of their neurosurgical referrals, despite perceptions to the contrary [1].

1)
Gulsin GS, Anichini G, Bhatt P. Perceptions, misconceptions and review of a neurosurgery on-call service in a university teaching hospital. Br J Neurosurg. 2016 Jan 13:1-4. [Epub ahead of print] PubMed PMID: 26760292.