

Laurence O'Shaughnessy: outstanding thoracic surgeon, killed in the retreat to Dunkirk

This year we commemorate the 75th anniversary of the death of Laurence Frederick O'Shaughnessy. He died on 21 March 1940 at the tragically early age of 39 years while serving as a surgeon in the Royal Army Medical Corps.

O'Shaughnessy was born in Sunderland, County Durham on Christmas Eve 1900. His father was an inspector of customs and excise. He was educated at South Shields Grammar School, then entered the Newcastle Medical School, obtained a string of scholarships and qualified in 1923 at the University of Durham. He served as assistant pathologist, then house surgeon and house physician at the Royal Victoria Hospital, Newcastle before going south as house surgeon at the Royal Northern Hospital in north London (once famous for its string of distinguished members of staff, now sadly no more).

In 1924 he joined the Sudan Medical Service, then staffed mainly by British medical graduates, and was put in charge of surgery at the Omdurman Hospital (where he gained an enormous and wide surgical experience), as well as carrying out experimental thoracic surgery at the Kitchener School of Medicine, again with its predominantly British staff.

He learned German and, during his home leave, travelled to Berlin to work under Ferdinand Sauerbruch at the Charité Hospital. After finishing his appointment in the Sudan in 1931, he returned to Berlin and spent 6 months with Sauerbruch, certainly the best known thoracic surgeon in prewar continental Europe, who O'Shaughnessy would refer to afterwards as his spiritual father.

On returning to England, O'Shaughnessy was appointed the first research scholar at the Buckston Browne Farm at Downe, established by the Royal College of Surgeons for experimental surgery, where he carried out a wide range of studies,

Professor Harold Ellis is Emeritus Professor of Surgery, Guy's, King's and St Thomas' School of Biomedical Sciences, London SE1 1UL

particularly on problems of cardiac revascularization in the greyhound.

As well as his experimental surgery, O'Shaughnessy was one of the early full-time thoracic surgeons in this country, commuting widely between his hospital appointments and his laboratory work. His most important clinical post was at the Lambeth Cardio-vascular Clinic, established by the London County Council at Lambeth Hospital. He was also thoracic surgeon to the British Legion Sanatorium at Preston Hall in Kent, predominantly dealing with advanced pulmonary tuberculosis, as well as appointments to tuberculosis sanatoria in Nottingham and Birmingham.

O'Shaughnessy's principal interest was on the revascularization of the myocardium in coronary arterial disease. The first in this field was Claude Beck (1894–1971) at the Western Reserve University, Cleveland. After much animal experimental work, he performed his first human operation in 1935. The patient was a man aged 48 years with severe angina. Beck abraded the surface of the left ventricle and attached to it a pedicle graft of the pectoralis major muscle. Seven months later, the patient returned to work as a gardener. Beck continued his work until the introduction of coronary bypass surgery.

Meantime at the Buckston Browne Farm, O'Shaughnessy was studying the use of a pedicled graft of the omentum brought up to the heart in greyhounds. This was published in the *British Journal of Surgery* in 1936. He was able to demonstrate that animals who had undergone left coronary artery ligation had normal exercise tolerance following the graft procedure. Injection studies using Indian ink at postmortem demonstrated satisfactory flow into the myocardium.

By 1937 O'Shaughnessy could report in the *Lancet* on a series of various procedures he had carried out on 20 patients with severe cardiac ischaemic disease. Of 12 patients undergoing cardio-omentopexy, nine achieved remarkably good results;

bed-ridden patients were restored to good exercise tolerance and could return to work. There were three postoperative deaths.

I was particularly interested in O'Shaughnessy's research because in 1958, while carrying out experimental studies on postoperative abdominal adhesions for my Doctor of Medicine thesis, I showed that adhesions between the omentum and a devascularized segment of small intestine could produce such extensive vascular anastomoses that the ischaemic intestine could survive with its new blood supply. Searching for previous publications in this field first led me to the brilliant studies of O'Shaughnessy.

Shortly after returning from the Sudan, O'Shaughnessy joined the Royal Army Medical Corps Territorial Branch and was called up for service at the outbreak of the Second World War in September 1939. He was promptly posted to France with the British Expeditionary Force, as surgeon, first to the 13th General Hospital and then, now promoted to Major, to a casualty clearing station. In the early days of the retreat of the British army to Dunkirk, O'Shaughnessy was killed by a bomb during a German air raid.

His body was never recovered and his name is engraved on the memorial to those with no known grave at Dunkirk. He left a wife (herself a doctor), and a young son.

O'Shaughnessy had a brilliant mind, a wide knowledge of surgical publications, both from home and abroad, and was a surgeon of tremendous energy, who devoted himself to his patients and who had little regard for money. Who can tell what more he would have contributed to surgery had he lived? **BJHM**

Conflict of interest: none.

O'Shaughnessy L (1936) An experimental method of providing a collateral circulation to the heart. *Br J Surg* 23(91): 665–70

O'Shaughnessy L (1937) Surgical treatment of cardiac ischaemia. *Lancet* i: 185