The centenary of John Charnley's birth

This year is the centenary of the birth of John Charnley. Some of his legacy to Orthopaedic Surgery is described in this editorial.

John Charnley would have been 100 years old this year. It is extremely difficult to provide a legacy in 500 words for a man who was active for nearly 50 years in orthopaedic surgery, the author of hundreds of articles, three textbooks and a dissertation on cement.

His earlier contribution to fracture management, modification of walking callipers, disc surgery and compression arthrodesis of the hip, knee and ankle are frequently forgotten in the blaze of success of low friction arthroplasty of the hip, and the use of bone cement. Forgotten also are the dark days with the failure of Teflon, fractured implants and the reporting of 'cement disease' from the United States. Clean air theatres starting at Wrightington as a small greenhouse set up overnight and taken down after a full day's operating are now standard and essential equipment used around the world to minimise infection.

Meticulous attention to detail, full histories, the accurate taking and typing up of notes and regular follow-up were all part and parcel of a normal day. Discipline and time were paramount. Training was hands-on, one-to-one, and included sessions in the biomechanics lab using a lathe and a milling machine.

Over a 15-year period there were 12 residents per year, many from overseas. Many of these became disciples who taught and demonstrated the techniques and principles instilled at Wrightington around the world. All were included in the Charnley extended family and many have remained friends and colleagues.

When John Charnley died in 1982 there was much unfinished research and many specimens were awaiting dissection in order to analyse the performance of cement in successful low friction arthroplasty. Lady Jill Charnley, with great foresight, arranged for this research to continue and the Charnley Trust was formed. The aims of the trust were to assist committed young orthopaedic surgeons with grants, bursaries and research projects, to arrange lectures and seminars and to allow successful applicants to visit centres of excellence around the world. So far a total of £1.7 million has been awarded. Last year a further legacy from Doreen Latta, an old patient, produced the Charnley Latta Travelling Scholarship.

In 1990 the Educational Centre was opened by Lady Charnley with its 80-seat lecture hall and five seminar rooms which are all used daily by healthcare professionals, covering a wide range of topics from recent advances in hip replacement to handling and lifting in the work place. The money for this was raised in his memory by the Wrightington Hospital Education Trust.

The Patient Information Centre was created by the Charnley Trust to enable patients to browse through an interactive site before or after consultation to answer any unasked questions. All part of Charnley’s dictum that “the patient comes first”, it is the first example of such a centre in the United Kingdom and probably the world. Staffed by volunteers, either former staff or patients, it has revolutionised the entrance hall and access to the main hospital. If they wish, they can even see a video of Charnley performing a hip replacement. His original workshop has been refurbished as a teaching facility and museum for those contemplating a career in medicine, and the greenhouse has been recreated to demonstrate the operating theatre and the clean air system. Patients and visitors find this of great interest.

In May of this year at Wrightington Hospital we will be marking the 100th anniversary with a series of lectures entitled “100 tips and tricks” from experts in their field, be it hip, knee, shoulder, ankle or hand. Dan Berry from the Mayo Clinic has kindly agreed to give the Centenary Charnley Lecture on Monday 16 May.

Variously described as a rebel, a maverick and a genius, John Charnley was a mixture of all three with a large portion of the latter. His legacy lives on.

Chris Faux
The John Charnley Trust