

Just Lucas-Championnière: pioneer of antiseptic surgery in France

In 1867, in five successive issues of the *Lancet*, Joseph Lister published one of the most important papers in the history of surgery, entitled 'On a new method of treating compound fractures, abscesses etc. with observations on the conditions of suppuration'.

Among the many cases cited, dating back to the beginning of the study in the summer of 1865, he reported the treatment of 11 compound fractures of the limbs.

Nine patients recovered, with their fractures healed. There was one death from haemorrhage in a quarry worker with a severe comminuted fracture of the femur, and there was one infection in a man with a compound fracture of the tibia, who was the only patient who required amputation. This series could be compared with the collected previous figures from Lister's surgical wards at the Glasgow Royal Infirmary, where 90% of compound fractures had required amputation and the mortality rate had been 46%.

One might have expected that these remarkable results, together with his case reports of brilliant successes in other fields of surgery, such as drainage of tuberculous abscesses, would have been followed by universal acceptance of Lister's antiseptic principles. After all, just a few years before, in 1846, the dramatic news of the use of ether and then of chloroform to assuage the agonies of surgery had resulted in the rapid and universal adoption of general anaesthesia.

Those surgeons who visited Lister's wards and theatre and who learned his meticulous ritual of wound care were impressed and reproduced his excellent results in their own practice, and this applied particularly to visitors from the continent. However, many others, especially in Britain, simply regarded carbolic acid as just another of the many hundreds

of medicaments, over the centuries, which had been advised as applications to wounds. Indeed, some surgeons had tried out this very compound in the past.

In 1867, a French medical student, Just Lucas-Championnière, read Lister's papers in the *Lancet* and the following year visited Lister in Glasgow and spent a month observing his practice in the wards and theatres of the Royal Infirmary. In June

'[Lucas-Championnière's] advocacy of the antiseptic regimen was met with indifference or even ridicule by many of his colleagues.'

1869, he published the first account in France of Lister's antiseptic technique. He visited Lister a second time in 1875, now at the Royal Infirmary in Edinburgh and, in that year, published the first French textbook on antiseptic surgery *Le Manuel de Chirurgie Antiseptique* (a second edition appeared in 1880). As editor of *Journal de Médecine et de Chirurgie Pratiques* (which his father had founded and of which his brother was co-editor), he published numerous articles on antiseptics in his journal.

Surprising as it may seem to us today, his advocacy of the antiseptic regimen was met with indifference or even ridicule by many of his colleagues. The two surgeons, Lister and Lucas-Championnière, remained firm friends. In the Lister Jubilee edition of the *British Medical Journal* in 1902 he traced the history of Lister's work in an article entitled 'An essay in Scientific Surgery. The Antiseptic method of Lister in the present and in the Future'.

Just Marie Marcelin Lucas-Championnière was born in 1843 at St. Leonard in Oise, to the north of Paris, where his father was a distinguished physician. He studied medicine at the University of Paris, became interne en médecine in 1866 and graduated MD in 1870, just in time to serve as a doctor in the Franco-Prussian war of that year.

Lucas-Championnière's first appointment was as surgeon to the Cochin mater-

nity hospital in Paris. Here he introduced the Listerian technique with dramatic results – the maternal mortality dropped from 50 to two per 1000 deliveries. Later appointments were as surgeon to the Hôpital St. Louis and finally to the Hôtel Dieu before his retirement in 1906.

Apart from his work on antiseptics, his interests were wide. He was interested in the surgery of groin hernias and published

numerous papers on their radical cure. Concerned by the poor functional results of the treatment of simple fractures by prolonged immobility, Lucas-Championnière introduced early mobilization, muscle exercises and massage. He published a textbook on the details of his technique in 1910. Of course, application of his treatment by others to major injuries gave poor results.

In 1876, Lucas-Championnière wrote a prize essay on cerebral localization and trephination of the skull and in later years gave much attention to skull trephination in primitive communities (a fascinating subject; the operation was carried out over the centuries across the world, from Central and South America to the South Seas).

What a remarkable man! Lucas-Championnière was an enthusiastic cyclist – not enough just to enjoy his hobby, he became President of the Touring Club of France.

In 1906, Lucas-Championnière attended the Royal College of Surgeons in London to receive an Honorary Fellowship. Some years before his death, his health began to deteriorate. At the Sheffield meeting of the British Medical Association in 1908 he appeared frail, but gave his paper on his technique of fracture treatment. On 22 October 1913, at the annual public meeting of the Institut de France, he gave a paper on trephination of the skull in prehistoric times. Having given his lecture he collapsed. His medical colleagues went to his assistance, but he died almost at once. **BJHM**

Conflict of interest: none.

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