

Charles McBurney (1845–1913) and McBurney’s point

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The name McBurney remains eponymously associated with the term ‘McBurney’s Point’ that was described by this New York surgeon in 1889 as the choice diagnostic sign of acute appendicitis [1]. Five years later, he introduced the muscle-splitting or grid-iron incision for appendectomy, the technique that thereupon became known as ‘McBurney’s incision’, and the second eponym associated with his name [2].

Charles McBurney, born in 1845 in Roxbury (Massachusetts), studied at the Harvard Medical School (Cambridge, Mass.) and at the New York College of Physicians and Surgeons, where, in 1870, he obtained his MD [3] (Fig. 1). He subsequently spent 2 years in Europe for further studies and specialisation and returned to New York where he took up practice as a surgeon and was appointed assistant demonstrator in anatomy at the College of Physicians and Surgeons. In 1880, he was elected assistant surgeon at the Bellevue Hospital in New York, and 8 years later, in 1888, became surgeon-in-chief of the surgery department at the Roosevelt Hospital in New York.

This American pioneer of abdominal surgery published more than 100 articles, but it is the two above-mentioned

articles that secured his lasting niche in medical history [1, 2]. McBurney died in 1913 of coronary thrombosis while on a hunting trip.

Illnesses were not always considered objective entities. As a textbook example one may take the case of acute appendicitis, which until 1880 was held to be the consequence and not the cause of the inflammation of the peri-caecal and retrocaecal tissues [4, 5]. Hence the historical name ‘typhlitis’ or ‘perityphlitis’ (from the Greek word “tuphlos” meaning ‘blind’ and, by extension into Latin, *caecum*) and the conservative treatment of the sufferers: to apply an anti-inflammatory icepack to the abdomen, administering laxatives and drastics to counter the accompanying intestinal obstruction, and opium to alleviate the pain. The appendicitis had remained the exclusive domain of the physicians who, when they palpated a fluctuating abscess beneath the abdominal skin wall, called upon surgeons to have this abscess punctured or incised.

This deep-rooted viewpoint about the cause and treatment of acute appendicitis would only become seriously challenged in 1886, that is 4 years after physicians had been unable to save the life of the French politician Léon Gambetta (1838–1882), who died of appendicular peritonitis.

The man who challenged the tradition was Reginald Heber Fitz (1843–1913), professor of pathological anatomy at Harvard. That year, in 1886, he delivered a historic lecture to the members of the Association of American Physicians during which, with reference to 500 autopsies and the study of the clinical context of the deceased, he demonstrated that perityphlitis originates in the appendix and without any ado devised a fitting name for the ‘new disease’: ‘appendicitis’ [6]. Fitz concluded his address with the following message: if the patient’s complaints do not disappear within 24 h, the surgeon should without delay remove the *corpus delicti*, meaning the vermiform appendix.

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Fig. 1 Charles McBurney

In actual medical practice, the application of Fitz's message ran into two obstacles: (a) the (family) doctors, the first to be consulted by the patients, had to correctly diagnose the affliction, and (b) they had to be convinced that Fitz, a pathologist-anatomist, was right in his assumptions.

A small number of American surgeons were able to satisfy this double requirement. One amongst them, Charles McBurney, would show that early appendectomy was a fairly non-risky and simple operation [1]. As already mentioned supra, he moreover offered the surgeons a simple diagnostic tell-tale sign: 'point of maximum tenderness which should be determined by pressure of one finger, the point is situated 1½ inch from the anterior superior iliac spine on a straight line drawn from that process to the umbilicus' (Fig. 2).

Notwithstanding the above, it would be a few years still before early detection and early surgical treatment became commonly accepted. As a historical paradigm I mention the case of Harvey Cushing (1869–1939), a resident-surgeon (and a patient) at the Johns Hopkins Hospital in Baltimore. The appendectomy was postponed on the advice of the internist Prof. William Osler (1849–1919), until, ultimately, it was the patient who, impelled by the steep rise of the leukocytosis, insisted on surgery and was successfully operated on by his chief Prof. William Stewart Halsted (1852–1922) [7].

In Europe, the Fitz rule was more slowly adopted than in America, in spite of the fact that Charles Krafft (1863–1921), the young assistant to César Roux (1857–1934), Head of the

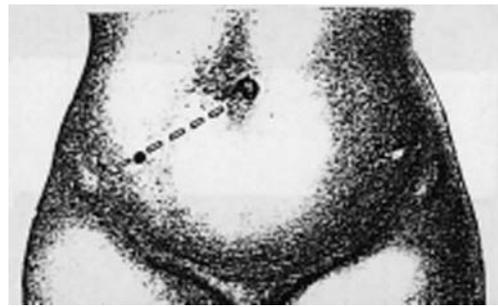


Fig. 2 McBurney's point

surgery department at the Cantonal Hospital of Lausanne, had, 3 years after the publication of Fitz's article, ended his clinical-pathological investigations with this conclusion: "Die Behandlung der Perityphlitis gehört zum Gebiete der Chirurgie. Eine sichere, einen Rückfall ausschliessende Heilung ist nur von einer operativen Behandlung zu erwarten" [8, 9]. In fact a reiteration of the conclusions in his French paper: 'Sur le traitement chirurgical de la pérityphlitis stercorale perforatrice' (Zurich 1889): 'One can never be too soon in operating in this case. And when, perchance, the appendix is found to be unaffected, then a small remaining scar as a result of the operation will hardly be taken as a disaster' [8].

Nevertheless, Krafft's message fell on deaf ears, except in Germany, where the aging Richard von Volkmann (1830–1899), with whom Krafft had apprenticed, would without delay promote the appendectomy. Even César Roux himself remained doubtful about the thesis of his young assistant and would jokingly refer to perityphlitis as 'Krafftitis' [8]. In France, Georges Dieulafoy (1839–1911) was the only one who without any hesitation turned away from the conservative treatment of acute appendicitis. It was, in fact, owing to the 'perityphlitis' that nearly ended the life of Edward VII, King of England (1841–1910), that also in Europe the prolonged dispute between the conservative treatments as opposed to the novel surgical intervention finally was laid to rest.

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