

Biographical Sketch

John Gregory Smith, FRCS

Richard A. Brand MD

Published online: 22 January 2010
© The Association of Bone and Joint Surgeons® 2010

Abstract This biographical sketch of John Gregory Smith corresponds to the historic text, *The Classic: Pathological Appearances of Seven Cases of Injury of the Shoulder-Joint: With Remarks*, available at DOI [10.1007/s11999-010-1231-x](https://doi.org/10.1007/s11999-010-1231-x).

This month's symposium is devoted to contemporary knowledge about rotator cuff tears. We reproduce here a paper by John Gregory Smith describing seven cases of torn rotator cuff tendons; these descriptions may well be the first for tears of tendons of the rotator cuff, although Smith did not use the term "rotator cuff" [5]. Mr. Smith was a surgeon and anatomist at the Hunterian Theater of Anatomy, Great Windmill Street, Haymarket, London, and a member of the Royal College of Surgeons [1]. Despite some searching, I have discovered little about this surgeon. He did apparently perform in 1871 the postmortem exam on the famous Charles Babbage [6], who invented a complex computing machine and is considered by many as the "father of the computer" [2]. (In fact, half of Babbage's brain remains at the Hunterian Museum in the Royal College of Surgeons.)

Based on dissections of seven shoulders in five cadavers, Smith described a variety of partial and full tears of the various rotator cuff tendons: the subscapularis, supraspinatus, infraspinatus, and teres minor muscles. In his seven cases, various combinations were torn, along with the long head of the biceps tendon. The ages of these cadavers ranged from 36 to 56 (acquired "under the new regulations provided by the Anatomical Bill"), although one was of

unknown age (acquired "under the old system of violation of the grave..."). "It is a curious fact, that in two instances both joints of the same individual should have presented nearly similar appearances, and that the same cause should probably have produced exactly similar results" (which he later speculates was caused by a fall with both arms extended and a dislocation.) In three cases these injuries occurred in association with a fracture (clavicle in one and acromion in both shoulders of one subject). These seven cases "occurred in the comparative small number of dissections, not exceeding forty individuals..." In one case (II), the patient died at age 30 of consumption, and in that case only the subscapularis and long head of the biceps tendons were torn. "The ruptured extremities of the tendon (long head of the biceps) were perfectly smooth and rounded..." Whether or not all of these ruptured tendons were caused by injury we cannot know, although it is likely they were. On the other hand, Codman's report of two cases (patients aged 52 and 40) [3] (reproduced as a Classic in *Clinical Orthopaedics and Related Research* in 1990 [4]) appeared to have occurred spontaneously, although both patients were working at the time and both sensed something snap or give way in the shoulder. Codman repaired both of these injuries, with apparent restoration of function.

Our understanding of rotator cuff tears, whether traumatic or more commonly degenerative, has greatly advanced since these early descriptions. Our symposium this month reflects these advances and the options of treatment, while recognizing much remains to be learned.

R. A. Brand (✉)
Clinical Orthopaedics and Related Research, 1600 Spruce Street,
Philadelphia, PA 19103, USA
e-mail: dick.brand@clinorthop.org

References

1. The Annual Course of Twelve Lectures in the Science of Anatomy. *The Literary Gazette and Journal of Belles Lettres, Arts, Sciences,*

- Etc.* Available at: http://books.google.com/books?id=oMy8qqVExeUC&pg=PA61&lpg=PA61&dq=%22John+Gregory+Smith%22+anatomy&source=bl&ots=89NXxTSw6U&sig=D8L3se9ai-ra7PTfi2R6CTbi_lw&hl=en&ei=6Ok4S43yII7JIaeg9uCoBw&sa=X&oi=book_result&ct=result&resnum=8&ved=0CCQQ6AEwBw#v=onepage&q=%22John%20Gregory%20Smith%22%20anatomy&f=false. Accessed December 27, 2009.
2. Charles Babbage. 2009. Wikipedia Web site. Available at: http://en.wikipedia.org/wiki/Charles_Babbage. Accessed December 28, 2009.
 3. Codman EA. Complete rupture of the supraspinatus tendon. Operative treatment with report of two successful cases. *Boston Med Surg J.* 1911:708–710.
 4. Codman EA. Rupture of the supraspinatus tendon. 1911. *Clin Orthop Relat Res.* 1990:3–26.
 5. Smith JG. Pathological appearances of seven cases of injury of the shoulder joint: with remarks. *London Medical Gazette.* 1834;14: 280–285.
 6. Williams MR. The “Last Word on Charles Babbage”. *IEEE Annals.* 1998;20.