Local Action, Global Impact: Acute Appendicitis as a Metric for Surgical Care Quality

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Throughout history, renowned clinicians, anatomists, and researchers have endeavoured to understand acute appendicitis over the course of two millennia. Galen referred to the condition as “colic passion,” while the eminent anatomists Vesalius and Fallopius both made early descriptions of the human appendix. In the absence of effective operative techniques, treatment methods were limited, with Boerhaave advocating heated bowel washouts, compression, and bloodletting. It wasn’t until the early eighteenth century that English and French surgeons described the operative removal of the human appendix.

In Post-bellum America, Fitz coined the term "acute appendicitis" and provided an accurate description of its pathology. In an era predating antibiotics, it became evident that surgery was the only viable treatment for this potentially fatal disease. The saga of King Edward VII’s appendix brought the condition into public prominence, as the king reluctantly consented to undergo surgery, performed by eminent surgeons including Sir Frederick Treves, Lord Lister, and Sir Thomas Smith.

Since then, acute appendicitis has remained a quintessential surgical disease. When diagnosed promptly and managed appropriately, surgical intervention is curative with minimal morbidity. However, neglect or inappropriate treatment can lead to significant morbidity and mortality. The ubiquity of acute appendicitis makes it a potential benchmark for comparing healthcare systems, serving as a marker of the quality of surgical care.

Unlike obstetrics, general surgery lacks a reliable metric for assessing quality of care due to the relative infrequency of individual surgical procedures and diseases. Acute appendicitis, with its standardized treatment approach and common occurrence, holds promise as a metric for quantifying the quality of a surgical system. Establishing global studies around acute appendicitis outcomes could facilitate the development of quality metrics to benchmark different surgical systems.

Routine data collection on acute appendicitis could enable the development of meaningful metrics to track the implementation and outcomes of quality improvement programs aimed at enhancing surgical care. Historically, the surgical community has mobilised around specific diseases to raise public awareness and promote concepts like screening and early diagnosis. It is time to adopt a similar approach with acute appendicitis, leveraging collaborative efforts to document its global incidence, management, and outcomes, ultimately improving surgical care worldwide.