



Appendicectomy in sub-Saharan Africa: a tale of too many and too few

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The gold standard treatment for acute appendicitis remains appendicectomy, despite ongoing debates regarding the necessity of surgical intervention. In sub-Saharan Africa, there is a perceived increase in the incidence of acute appendicitis. However, evidence indicates that a significant proportion of affected individuals do not undergo timely appendicectomy, with estimates suggesting that 60-76% of cases remain untreated. This stands in stark contrast to the relatively low unmet need for appendicectomy in Europe, which ranges from 5-8%. Challenges such as limited access to emergency surgical care, financial barriers leading to out-of-pocket expenses, and reliance on alternative medicine contribute to this disparity, resulting in increased morbidity and mortality. Improved healthcare financing, availability of trained surgical teams, better referral systems, and sustained health information among the populace may improve this current gloomy picture3).

Paradoxically, there is also an issue of overutilization of appendicectomy in the subregion, as evidenced by reported rates of negative appendicectomy ranging from 16% to 33% (4,5). Diagnosis of acute appendicitis relies heavily on clinical evaluation, with adjunctive imaging modalities and biochemical markers often unavailable or prohibitively costly at primary and secondary care levels. This reliance on clinical diagnosis may contribute to the high rates of negative appendicectomy, particularly in certain patient demographics. Development of local algorithms utilising artificial intelligence and machine learning in the subregion may improve the diagnosis and ensure unnecessary procedures are reduced.

The underutilization of laparoscopic appendicectomy further compounds the challenges faced in sub-Saharan Africa. Data from the GlobalSurg Collaborative indicates that only 8.4% of appendectomies in low- and middle-human development index (HDI) countries are performed laparoscopically, compared to 67.7% in high HDI countries (6). However, patients undergoing laparoscopic procedures in low- and middle-HDI countries experience fewer overall complications. Bridging this gap requires addressing barriers such as training, equipment costs, supply chain logistics, and strengthening local surgical systems (7). Until these solutions are found, appendicectomy in sub-Saharan Africa will continue to pose challenges to the patients, the surgeons, and the healthcare systems.

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