The negative appendicectomy rate in Zaria, Nigeria

To the Editor: Appendicitis is considered the most common cause of an acute abdomen in surgical practice. Many other acute abdominal conditions mimic acute appendicitis. If the appendix is removed in such cases it is histologically normal (negative appendicectomy). The negative appendicectomy rate (NAR) has been reported as about 20% in Zaria, Nigeria. A low NAR indicates good-quality surgical care. At our institution the NAR was 15.6% between 1979 and 1983. We set out to determine whether there has been any change in the NAR, and if so what factors might be responsible for the change.

We carried out a descriptive study of 242 appendicectomies carried out at our institution during the 5 years starting from January 2004. Statistical analysis was performed using SPSS version 17.

Patient ages ranged from 3 to 70 years (mean 26.5 years). There were 116 males (47.9%) and 126 females (52.1%). Over the study period the appendix was reported to be histologically normal in 14 cases, giving an NAR of 5.8%. The NAR for females was 6.3% and that for males 5.2%. When individual years were analysed separately a notable downward trend in the NAR was evident.

This study demonstrates that the NAR in Zaria has fallen significantly from 15.6% to 5.8% in recent years. Interestingly, the period under review (2004 - 2008) was remarkable in terms of increased use of imaging techniques such as computed tomography and ultrasound, which had previously not been easily accessible, indicating that such imaging techniques can improve surgical care and drastically reduce the NAR, and suggesting that the earlier high NAR was probably due to their absence. This is extremely important, as appendicitis forms the major bulk of surgical emergencies in Zaria.

The study was retrospective and involved few patients, but it showed that there is a downward trend of NAR at our institution. It will form the basis for a larger study.

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