

Histopathological Review of 1510 Appendices Removed for Acute Appendicitis in a Teaching Hospital in Jordan: A Retrospective Analysis

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Abstract

Introduction: Acute appendicitis is one of most common surgical procedures with a lifetime incidence of 7%. The diagnosis of acute appendicitis is considered challenging despite advancement in technology and imaging modalities. Unusual histologic findings mandate a careful histological examination of all resected specimens.

Methods: A retrospective study of 1510 patients who underwent appendectomy for a presumptive diagnosis of appendicitis from January 2011 to December 2017. The aim of this study is to review appendectomy specimens regarding diagnostic accuracy, patients' characteristics, perforation rates and the unusual histopathologic findings, and to compare these figures with other reported data from Jordan and other countries.

Results: A total of 1510 patients were included, a diagnosis of acute appendicitis was proved in 1131 patients, with a diagnostic accuracy of 74.9%. More than 83% of cases were phlegmonous appendicitis, perforation was documented in 158 patients; it was significantly more in men than in women. A significantly higher rates of negative appendectomy were in women. Unusual histopathologic findings were reported in 72 case, of which 12 were with acute appendicitis and 60 in negative appendectomies.

Conclusion: The occurrence of acute appendicitis in Jordan shares several epidemiological features with those reported from other countries. A careful histological examination for resected specimens is mandatory due to the evidence of significant unusual pathological findings.

Key words: acute appendicitis, perforated appendix, appendix: unusual histopathological findings