A Clinicopathological Study of Emergency Appendectomy

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Background: Acute appendicitis is one of the most frequent reasons for admission to the surgical unit and appendectomy is the most common emergency procedure performed worldwide. The accuracy of diagnosis is not straightforward at all times. A lower negative appendectomy rate (NAR) is regarded internationally as a quality indicator of the treating center.

Objective: To determine the diagnostic accuracy of appendicitis by clinical, radiological and histopathological findings.

Design: A Retrospective Review.

Setting: King Hamad University Hospital, Bahrain.

Method: Patients who had appendectomy were included in the study. Data were documented between January 2013 and December 2014. All patients above 14 years of age were included. Incidental appendectomy and appendicitis during pregnancy were excluded from the study.

Result: The medical records of 286 patients who underwent appendectomy were reviewed; 187 (65.4%) were males. The mean age was 29.3 years. The negative appendectomy rate (appendix is normal on histopathology) was 29 (10.1%) while another pathology other than appendicitis was found in one (0.349%). Twenty-nine patients had a normal appendix, 20 were females. The total perforation rate was 28 (10%). Complications were encountered in 2 (0.69%) patients. Ultrasound was used in 86 (30.1%) patients and conventional tomography used in 67 (23.43%) cases. The overall accuracy of both clinical and radiological diagnosis was 89.16%. The mean age was 29.3 years.

Conclusion: The diagnostic accuracy, in our study, was 89.16%. Clinical diagnosis and radiological imaging, especially in females, could decrease the NAR to an acceptable rate.

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