

Hyperbilirubinemia in Acute Appendicitis

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Background: Early detection of complicated appendicitis in suspected patients is essential because the complication could be fatal. One of the new potential predictors of severity is preoperative hyperbilirubinemia.

Objective: To evaluate the bilirubin level in complicated appendicitis.

Design: A Single-Center Cross-Sectional, Retrospective Study.

Setting: Salmaniya Medical Complex, Bahrain.

Method: Three hundred thirty-seven patients with acute appendicitis admitted between January and November 2018 were included in the study. Patients 14 years of age and above who underwent appendectomy were included. Normal appendix or other histopathological diagnoses, elevated bilirubin with hemolytic or liver disease, and age below 14 years (pediatric age group) were excluded. The analysis was performed by the Statistical Package for the Social Sciences (SPSS®) software and Microsoft Excel.

Result: The age range was 14 to 77 years. Two hundred sixty (77.2%) were males and 129 (38.3%) were Bahrainis. Thirty-four (10.1%) patients were diagnosed with complicated appendicitis. Eighty-two (24.3%) patients were found to have elevated bilirubin and 12 (3.6%) were associated with complicated appendicitis, P-value of 0.1162. The majority of patients were found to have elevated WBC count, 234 (69.4%), and neutrophil percentage, 208 (61.7%).

Conclusion: In our study, we found no significant correlation between high bilirubin levels and complicated appendicitis. Therefore, we do not recommend the routine use of bilirubin in diagnosing acute appendicitis in our center.