

The Value of Serum Bilirubin Level and of White Blood Cell Count as Severity Markers for Acute Appendicitis

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Abstract

Discussions regarding the correlations between elevated white blood cell levels and clinical and pathological stages of acute appendicitis are well known. Recent studies show that a high level of serum bilirubin could emerge as a prognostic marker for gangrenous or perforated stages of acute appendicitis. We studied the correlations between anatomical and pathological stages of acute appendicitis and white blood cell count, serum total bilirubin, and indirect serum bilirubin on a large series of cases, in the course of one year, in our department. Although there being a correlation between severe forms of acute appendicitis (gangrenous, perforated), elevated white blood cell count, elevated serum bilirubin (mostly the indirect fraction), none of the indicators proved to have a definitive diagnostic value. Cases with perforation and localized/generalized peritonitis are more frequently associated with elevated bilirubin levels.

Key words: acute appendicitis, elevated bilirubin, perforated appendix, hepatic failure in sepsis

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