

Surgical Management of Acute Appendicitis in Children

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Abstract: A total of 154 acute appendicitis patients (between 4 to 15 years of age) were operated on in our hospital over the past 2 years. The pathological diagnoses were classified into three groups including; a minimal change-Catarrhalis group (n=54), a phlegmonous group (n=76), and a gangrenous-perforation group (n=24). A common factor in both the Minimal change-Catarrhalis and the Phlegmonous groups was the presence of the Blumberg sign, while the Phlegmonous and the Gangrenous- Perforation group both had diarrhea, abdominal guarding and a high fever. In both groups the above sign was very significant. The number of the leukocytes and the CRP is thus considered to be another of the staging progress. The phlegmonous group showed the shortest time from onset to the operation. The operation time and the length of hospitalization increased as the stage progressed. On ultrasonography, the appearance rate of the appendix was high in the Phlegmonous group and the Absence of a submucosal echogenic stripe, Periappendiceal abnormality, and the presence of Ascites were frequently observed as the stage progressed. A CT scan showed the frequency of swelling of the appendix, an enhanced wall, periappendiceal inflammatory change and ascites to be significantly different between the Minimal change-Catarrhalis and the Phlegmonous groups. Diagnosing Acute Appendicitis in children is very difficult and the disease progression is quick. As a result, it is important to accurately evaluate the clinical findings in order to select the optimal treatment in a timely manner.

Key words: Acute appendicitis, children, ultrasonography, CT scan