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Appendectomy in Pediatrics the Value of Peritoneal Fluid Smear and Its Bacteriological Profile

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ABSTRACT

Introduction: Acute appendicitis is the most common cause of abdominal pain requiring surgery in children. In most instances the infecting organisms are normal inhabitants of the lumen of appendix. Surgery allows easy microbiological sampling. Aspiration of fluid or pus in a syringe is preferred. Swabs are less suitable and only to be used when sampling with a syringe is not feasible. Antimicrobial susceptibility testing of the isolated bacteria and particularly of the anaer- obes can be important to adjust therapy in case of the presence of multi resistant bacteria. Objective: The aim of the study was to determine the bacteriological profile of acute appendicitis in children. Materials and Methods: Study design is a prospective descriptive study including children hospitalized for acute appendicitis. Tissue samples (a speci- men of the appendix), peritoneal fluid swab from the appendicial fossa and the peritoneal exudates (if exists) obtained at surgery from 54 children with suspected acute appendicitis operated at the pediatric surgery unit at the Maternity and Child Teaching Hospital in Al-Qadisiya province from the period 1st of June 2007 to the end of May 2011, were exam- ined histologically and by culture for aerobic and anaerobic bacteria. Results: Out of these, 39 boys (72.2%) and 15 (27.7% girls). Their age ranged between (1.8 - 13) years, with a mean of 6.9 years. Of the all patients studied 34 pre- sented with suppurative and phlegmnous appendicitis, 8 with gangrenous appendicitis, 6 with septic complications of appendicitis and 6 had normal appendices. Only 80 of the 108 swabs taken yielded a positive culture (74.07%). Con- clusion: Although in our study no antibiotic regime was changed on the basis of a positive culture swab and the perito- neal culture swabs do not improve immediate postoperative therapy based on surgical impression and rapid histological reporting, however, the routine use of peritoneal culture swabs may be of value in identifying patients requiring outpa- tient follow-up.

KEYWORDS

Appendectomy; Pediatrics; Bacteriological Profile

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