

Acute Appendicitis; Metronidazole as Monotherapy and Early Intake of Oral Fluids:

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In acute appendicitis role of monotherapy still needs appreciation where there is no perforation or abscess formation. In these patients when a straightforward appendectomy has been performed early intake of oral fluids reduce patients stay in hospitals. A total number of 40 patients divided into two groups. A and B. Group A received one preoperative and two postoperative metronidazole doses and Group B received tripple therapy preoperative and for 72 hours postoperatively. Group A patients were started with oral fluids 6 hours after operation but in Group B oral fluids were started after 24 hours after listening bowel sounds. Results were same in both groups with reduction of hospital stay in Group A patients. No wound infection or complication seen in either group. Monotherapy with metronidazole is as effective as tripple therapy and early intake of oral funds can reduce hospital stay.

Key Words: Acute appendicitis, metronidazole monotherapy, early oral intake,

Appendectomy is a common surgical emergency. Among those cases where the appendix found to be only inflammed but not perforated there is usually no need of prolong nill by mouth or extensive use of antibiotics.

There are different schools of thoughts regarding preoperative and postoperative antibiotics in non perforated appendicitis, but most of them favour monotherapy. (For intra-abdominal infection of GIT origin of mild to moderate severity the surgical infection). Society recommended single agent therapy with cefoxitin, cefotatan or ticarcillin – clavulanic acid¹. On multicenter randomized trial of 1735 patients cefoxitin has been recommended as agent of choice². The Recommendations given by A. Cuschieri showed metronidazole as the agent of choice.

Starting of oral fluids has been linked with listening of bowel sounds. Some centers recommend early start of oral intake in non complicated cases in order to reduce hospital stay.

Patients and Methods

In this prospective study of 4 months (from October 1999 to January 2000) 40 patients were studied who presented with clinical diagnosis of acute appendicitis. These patients were divided into two groups. Group A comprises of 8 male and 12 female patients. Group B comprises of 9 male and 11 female patients. Mean age for Group A patients was 9 years while for Group B it was 8.5 years.

Group A patients received one preoperative and two postoperative doses of metronidazole according to weight of the patients.

Group B received tripple therapy (ampicillin, flagyl and gentacin) preoperative as well as for 72 hours post operatively.

All the patients were operated on the same day within 8 hours of presentation. Those patients where appendix found normal, perforated or abscess formation were excluded from the study.

Post operatively close observations were made. Six

hours postoperatively in Group A patients bowel sounds were listened and documented and abdomen palpated. None of these patients were complaining of nausea or vomiting, abdomen was soft in all 20 patients, but bowel sounds were positive only in 16 patients. Clear water 30ml/hour started in all 20 patients of group A, which converted into 60ml/hour after 3 hours and free fluids after 6 hour. None of these patients complained any problem apart from mild pain around wound. Within two hours of oral intake bowel sounds were also present in rest of 4 patients.

In Group B patients bowel sounds were listened after 24 hours and were present in all patients. Oral intake was started in same manner as mentioned in Group A patients i.e., 30ml, 60ml and then free fluids. In all these patients recovery was uneventful. Group A patients were discharged after 24 hours. While Group B patients were discharged after 72 hours. Two follow up appointments were arranged, one on 8th day when stitches were removed and other after one month.

Results

Results were same in both groups with reduction of hospital stay in Group A patients which was almost 1/3rd as compared to Group B. No wound infection seen in either group. Biopsy reports in these patients were consistent with clinical diagnosis of acute appendicitis.

Discussion

This pilot study which was done in children served two purposes. First one is the role of monotherapy i.e. flagyl which not only given the same result as tripple therapy but also proven itself effective enough in these cases.

Second purposes of this study was to reduce the time of hospital stay for these patients by starting early oral intake after 6 hours. In this study we did not wait for bowel sounds to come in Group A patients. All patients of Group A did tolerate oral fluids very well without complaining of any nausea or vomiting. The early oral intake in patients

with absent bowel sounds but otherwise soft abdomen was based on the fact that oral intake helps in starting gut motility.

References

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