Typhoid Perforation Treated with and without Metronidazole alongwith Chloramphenicol, Gentamycin

Pages with reference to book, From 49 To 50

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Abstract

Forty cases of typhoid ileal perforation were treated surgically in three years. Chioramphenicol and gentamycin were given to 20 patients, while the remaining 20, received Metronidazole additionally. The mortality rate was 60 percent in the first and 40 percent in the second group. (JPMA 46:49, 1996).

Introduction

Intestinal perforation is a common surgical complication in enteric fever. It occurs in 0.5[1] to 33.6%[2] of patients with a mortality of 7.9 to 57%[3,4]. The management of intestinal perforation in entenc fever has long been a controversial subject. Huckstep[5] strongly advocated conservative management, while more recently, there has been a consensus in favour of surgical intervention[6-8].

Chioramphenicol has been the antibiotic of choice for typhoid perforation since 1949. It is still in use for surgical prophylaxis. Despite the drug, the mortality rate after surgery is high. Kurlberg and Frisk[9] recommended an addition of gentamscin and metronidazole to chioramphenicol to improve the prognosis. A study was undertaken to compare the results of two.,groups of patients with typhoid perforation freat&i%s ith either chloramphenicol and gentamy cin or metronizidazole alongwith the tw antibiotics.

Patients and Methods

ycases of intestinal perforation were treated surgically at Victoria Hospital, Bahawalpur over a period of three years. Twenty were given the standard regime of chioramphenicol and gentamycin and 20 received chloramphenicol, gentamycin and metronidazole. Every case was promptly resuscitated and investigated pre-operatively. All were operated in emergency and theRerforation was closed in two layers with polygalactin sutures[11].

Results

There were 32 males and 8 females. Most of the patients were in the age group 11 to 20 years with an average of 19.3 years.Majority of perforations occurred in the first and second week of fever and most of them presented more than 3 days after perforation. The widal test was positive in 32 and negative in 8 cases. Biopsy was carried out in 33 cases, 27 had histologically massive areas of necrosis, degeneration and mononuclear and plasma cell infiltration. Six showed no histological change.

All perforations were situated within 2 feet from the ileocaecal junction. The size of the perforation varied from 2 mm to 25 mm in diameter. Out of 40, 20 patients died representing an overall mortality rate of 50%. Mortality was 40%, when metronidazole was added to the standard treatment and 60% in those treated with chloramphenicol and gentamycin alone. Recurrence of perforation, faecal fistula and toxaemia were the main causes of death.

Discussion

Typhoid ileal perforation is a serious surgical emergency where peritoneal cavity is flooded with the intestinal contents along with the typhoid bacilli, coliform aerobic and anaerobic micro- organisms. Antibiotic against salmonella only is not enough for these cases. For better results, chemotherapy against coliform and anaerobes is also required[12]. Thomas et al[13] recommended addition of metromdazole for typhoid perforation for better results. This study confirms previous reports[10,14] that adding metronidazole to gentamycin and chioramphenicol improves the prognosis in intestinal perforation due to typhoid.

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