

Typhoid Perforation: Results of Surgical Treatment

Pages with reference to book, From 46 To 47

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Abstract

Typhoid perforation is a common cause of Peritonitis and requires an early diagnosis, correction of electrolyte imbalance and prompt surgical treatment. The overall mortality rate has shown some improvement (i.e. 18.1%) by local excision of the ulcer site and anastomosis in two layers. The figure though better is still higher than 9.9% reported by Klim (1975) (JPMA 32:46, 1982).

Introduction

Peritonitis due to typhoid perforation is associated with marked toxicity, dehydration and electrolyte imbalance. This type of perforation forms 50% of total cases of intestinal perforations (Aziz 1978). A conservative approach in these cases has no place and the mortality is as high as 82.8% (Kurnvilla 1978).

The study of 22 cases of typhoid perforations is presented as a part of the trial to find out ways to reduce the mortality rate.

Material and Methods

Twenty patients were admitted with the diagnosis of acute abdomen, during the period from January, 1978 to January, 1980, in the Surgical 'B' Unit of Khyber Hospital, Peshawar. Eighteen were admitted as emergencies through the casualty out-door and 4 were referred from various medical units and were admitted through the regular out-patients departments.

Results

Most of the cases were males, and male to female ratio was 19:3. The common age group involved was between 19-32 years followed by the next lower age group of 10-18 years (Table-I).

Table I

Age and Sex

<i>Age groups</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
0-10 years	3	3	0
10-18 years	7	5	2
19-32 years	11	10	1
33-55 years	1	1	0

In all these patients, except three, a preoperative diagnosis of typhoid perforation was made on the history and clinical examination and was confirmed at laparotomy. In 3 cases the preoperative diagnosis was of a perforated appendix because the history was very short and pain was localised. Temperature of over 100.F of more than two weeks duration was recorded in all the patients. Abdominal pain was present in 81%, vomiting in 90%, abdominal distension in 81 and 18.9% patients were in shock.

In six out of 22 cases Salmonella Typhi was grown in cultures and others showed a predominance of E.coli. Widal's test was positive in all the cases.

Treatment

1. General

All these cases were treated in our unit and necessary investigations were done before emergency operations. Electrolyte imbalance and dehydration was corrected promptly and blood transfusion was given when considered necessary.

2. Surgical

Anaesthesia: General anaesthesia was used in all except in 2 cases where only drainage of the peritoneal cavity was carried out under local anaesthesia. These two patients were 1 male and 1 female. The female patient improved after simple drainage and parenteral drug therapy with chloromycetine. The male patient went into septicemic shock and died.

Operation: In all the cases we found more than one perforation, in the terminal 30 cm of ileum. We resected one cm area around the perforation and healthy bleeding edges of the gut were anastomosed together with 2/0 chromic catgut sutures in 2 layers. A thorough lavage of the peritoneal cavity was done to minimise collections at perforation sites. In two cases right hemicolectomy was performed because of multiple perforations and fibrous adhesions with caecum and ascending colon. In 4 cases only a histopathologica 1 report was available showing inflammatory changes consistent with salmonella infection.

Morbidity

Prolonged paralytic ileus was recorded in 4 patients, wound dehiscence in 3, incisional hernia developed in one patient whereas 2 cases had chest infection and 2 cases from the series formed a

faecal fistula.

Mortality

The outcome of treatment is shown in Table II. One female patient who underwent right hemicolectomy did not recover from shock. One male patient who also underwent right Hemicolectomy developed jaundice and went into Hepatorenal shut down and died. One patient operated under local anaesthesia for simple drainage also died. One patient developed faecal fistula and left the hospital against medical advice.

Discussion

It has been taught and practiced that typhoid perforation may be treated conservatively (Rains and Ritche 1975) which, in our experience is not true. The typhoid perforation gives rise to a generalised peritonitis (Mulligan 1972 and Olurin 1972) therefore surgical intervention should be prompt. Correction of fluid and electrolyte balance and anaemia will enable an already toxic patient with peritonitis to withstand surgery better. Limited resection of the diseased gut or excision of the ulcer site is recommended and has been effective in our series. Olurin and Ajayi (1972), recommend that a local excision or "wedge resection" should be done in limited number of perforations and not simple closure. Simple closure of the perforation carries a high mortality, and in patients with multiple perforations it is 100% while wedge resection has a mortality rate of 20%, (Olurin and Ajayi 1972). More than 100 cases are admitted every year in the surgical units of Lady Reading and Khyber Hospital with symptoms of peritonitis due to typhoid fever and they have an overall mortality of more than 62% with all types of treatment regimen which mostly includes the laparotomy, closure of perforations and peritoneal lavage. These two hospitals are the teaching hospitals of NWFP and have a tremendous turn over. Post operative morbidity though common has not been very disturbing in this series. No other intra-abdominal lesion apart from the intestinal perforation and peritonitis was observed. Whereas some authors have described perforation of the Gall Bladder (Vargas and Pena 1975) and the Vermiform appendix (Stuart 1946) in Typhoid Fever.

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