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A Case Report of Typhoid Perforation of the Ileum*

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We would like to present a case of hyphoid fever with perforation of the bowel which has been reported very rarely in recent years, and is seldom diagnosed pre-operatively.

Case Report

A. D., a 15 year-old boy was admitted to Hacettepe Children's Medical Center on the 15th of Nov, 1974, with the chief complaints of headache, diarrhea, fever (39°-40°C) and nausea of 15 days duration.

Physical examination revealed an acutely ill looking youngster with generalized abdominal tenderness. The spleen and liver were palpable below the costal margins. Rose-red spots were not detected.

Laboratory findings on admission were as follows: WBC, 4,400 mm.^{3} Stool and blood cultures showed no growths. Peripheral blood smear and routine urinalysis revealed no abnormalities. An agglutination titer for Salmonella Typhimurium O somatic and flagel antigen was 1/400 positive. The patient was put on Ampicilline treatment, 2 gm daily.

On the fifth day after admission, he developed an abdominal pain which became a continuously severe pain with a rigid abdominal wall. At that time an X-ray of the abdomen showed air below the diaphragm, and the white blood cell count increased to 12,600/mm^3. A tentative diagnosis of perforation of the bowel was made and the patient underwent laparotomy.

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The peritoneal cavity was found to contain approximately 100 ml yellowish-green fluid with a perforation measuring 2.5 mm in diameter, 15 cm above the appendix. The post-operative course of the patient was uneventful.

Discussion

The complication of perforation in typhoid fever occurs rarely in children. In one study 65 % of the perforations occurred in patients between the ages of 11 and 30 years.[1] Enteric fever is known to be the most common cause of perforation of the small intestine in the Tropics.[2]

Perforation of the gut may be manifested by an abrupt fall in temperature and circulatory collapse, vomiting, signs of peritonitis and a rapid rise in the level of blood leucocytes usually follows.

Some reports reviewed cases of typhoid perforation in large series. 13 out of 243 cases of typhoid fever had perforation; but only 5 of these were clinically diagnosed as typhoid perforation. The rest were proven at laparotomy or post-mortem examination.[3] In another consecutive series, 213 patients were operated on, all of which had typhoid fever with perforations which had occurred from 3 to 10 days prior to admission.[1]

The main cause of death is peripheral failure resulting from toxemia. It is reasonable to assume that the peritonitis which follows perforation must contribute as well.

The mortality rate in various series ranges from 20 percent to 40 percent and these series showed operative mortality usually within 24 hours of perforation as 13.3 %. In those patients operated on within five days or more following the onset of perforation, this incidence increases to 76 %. It is important to diagnose this condition as soon as possible. It would appear that in all perforations mortality is extremely high after the fifth day from the start of perforation.

Surgical treatment of typhoid perforation is a well known procedure. This may frequently be a simple closure or a wide resection of the ileum.[5,6] Some authorities recommend ileal resection, ileostomy or colostomy because of the risk of reperforation after surgical closure of a perforation.[7,8]

Success in the management of these cases depends on early clinical diagnosis, correction of shock, surgical treatment of the perforation (especially simple closure is recommended), and continued post-operative therapy.

When our patient was admitted he complained of abdominal pain but on the fifth day of the illness the abdominal pain increased and

abdominal rigidity developed. Therefore the possibility of typhoid perforation was considered. Because of this, the patient's condition was followed very carefully and this is an important point as it enabled the correct diagnosis to be made pre-operatively. As the operation was performed in time the patient was able to make a quick and uneventful recovery.

Summary

A case of typhoid fever with perforation of the gut is presented which has been reported only rarely in recent years.[7,8] In this patient the condition was correctly diagnosed and he was operated on in time; the patient made an uneventful recovery in a short time.

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