SUMMARY

A prospective study of 121 cases of peritoneal sepsis was conducted during the period from January 1995 to January 1996 at M.L.B. Medical College, Hospital, Jhansi, India.

For proper resource allocation and to know other factors affecting the outcome of patients, a grading of severity of peritoneal sepsis has been desired for a long time. The various scoring systems specially the MPI (Mannheim Peritonitis Index) and (Severity of Sepsis (SS) score have apparently moved in to fill the void.

Children below 36 months and patients of post-operative anastomotic dehiscence were not included in this study.

For MPI score, scoring was done peroperatively and 'SS' scoring continued even in post-operative period.

Analysis of the following were made using both the indices.

1. Sex
2. Age
3. Type of peritonitis
4. Duration of symptoms
5. Product of laparotomy
6. Temperature
7. Hb
   - White blood count
   - Bus culture
   - Blood Urea and Sugar
   - Serum creatinine & Bilirubin.

The present study showed that mean age of patient was 36.5 years and male population was affected in 63.63% cases. The youngest patient was a girl of 4 years and the oldest was a female of 72 years, 53% patients presented in the hospital between 30-50 hours after the perforation.

As regards the site, small bowel was most commonly involved followed by gastric and duodenal perforation.

Trauma was the most common cause of G.I. perforations in 24.5% followed by ulcer disease. Tubercular perforations were seen in only 2 patients.

Maximum number of patients (76) stayed for 10-20 days. Overall mean duration of stay was 14 days, and patients who stayed for 10-20 days had a mean MPI score of 22.5 and mean 'SS' score of 11.8 as compared to mean MPI of 28.3 and mean 'SS' score of 22.5 in patients staying for 7 31 days.
Morbidity and mortality was highest in enteric perforation and lung infection was commonest in ulcer perforation.

In present study, 18 (14.87%) patients expired with a mean MPI score of 32.16 (23-38) and a mean SS score of 25 (15-42) as compared to those who survived 103 (85.12%) had a mean MPI score of 25.2 (8-43) and a mean SS score of 12.3 (3-29). This low mortality may be because of traumatic peritonitis, where the patient recovers well as compared to pathological perforation. Most of the patient expired because of multiple organ failure.

Only 31 (30.1%) patients developed disease related abdominal complications and 20 out of these developed minor complications and 11 developed major complications like faecal fistula and pelvic abscess. Post operative morbidity was highest because of fistula.

Uneventful recovery occurred in 72 (69.9%) patients who were discharged on 10th to 14th post operative days.

The Mannheim peritonitis index is a well validated peritonitis specific index but further increase of its prognostic power is desirable.
The sepsis severity score can thus be used to follow the progress of a patient.