Summary

The goal of the present thesis was to assess the efficacy of ascitic fluid lactoferrin and multistix urine screening test in diagnosis of SBP and to identify a cut - off level of AFLAC that can be used for future development of a rapid bed side test.

For this purpose, 102 patients with decompensated liver disease were subjected to the following:-

- Thorough history taking.
- Thorough clinical examination.
- Full investigations including:
  - Complete blood count and ESR.
  - Liver profile.
  - Renal function tests.
  - Abdominal ultrasonography.
  - Diagnostic abdominal paracentesis: the ascitic fluid was subjected to the following:
    - Physical examination.
    - Biochemical examination.
    - Cell count (total and differential leucocytic count).
    - Testing by Multistex (10 SG) urine screening test.
    - Detection of AFLAC.
  - Modified Child's Pugh score.

SBP was detected in 20.6% of the decompensated cirrhotic cases included in this study.

The clinical findings of SBP were extremely variable. Abdominal pain, fever, upper GIT bleeding, hepatic encephalopathy, diarrhea and vomiting were the main clinical presentation in SBP patients (100%, 57.1%, 33.3%, 28.6%, 19.1% and 9.5% respectively).

Regarding clinical examination abdominal tenderness was detected in 85.7% of SBP group.

As regard the ultrasonographic findings in the present study the internal echoes in ascitic fluid and hepatic focal lesions were the only significant finding in SBP group. Most of cases of SBP had turbid ascitic fluid in (85.7%) while the hepatic focal lesions were detected in (9.5%).

In SBP cases, 57.1% were Child's Pugh class C and 42.9% were Child's Pugh class B.

Examination by Multistix were positive in (90.5%) of SBP group with sensitivity of 90.5%, specificity of 93.8%, PPV of 79.2% and NPV of 97.4%.

AFLAC was high in SBP group with a highly statistical significant difference in SBP group compared to non SBP group so it can serve as a sensitive and specific diagnostic test for detection of SBP in cirrhotic patients with ascites. The sensitivity of the test was 100% with specificity of 88.9%, PPV of 70% and NPV of 100% with the cut-off level was 255 ng /ml.

In the present study all patients with SBP recieved (Cefotaxime 2 g/fluid 12h for 5 days). Repeated diagnostic paracentesis was done 2 days after the start of antibiotic therapy to evaluate changes in ascitic fluid PMN count, Multistix results and lactoferrin levels in response to antibiotic therapy.

In all patients with SBP the positive cases by Multistix became negative, both the ascitic fluid PMN count and lactoferrin levels decreased significantly after the start of treatment .