MATERIAL AND METHODS

The present study was conducted on patients with clinical diagnosis of perforation of chronic peptic duodenal ulcer presenting emergency ward of M.L.B. Medical College, Jhansi in Department of Surgery from May 2000 to April 2004 (retrospective study) and May 2004 to April 2005 (prospective study).

Following plan of work was followed :-

1. Preoperative work up (Clinical and biochemical).
   A. Evaluation and analysis of symptoms in order to find out duration of perforation and incidence of each symptoms :-
      ➢ Pain in abdomen.
      ➢ Fever.
      ➢ Absolute constipation.
      ➢ Vomiting.
      ➢ Distension of abdomen.
B. Past history in order to find out high risk cases and incidence of acid peptic disease.
   ➢ Diabetes Mellitus.
   ➢ Hypertension.
   ➢ Pulmonary disease.
   ➢ Drug intake like NSAIDS & steroids.
   ➢ History suggestive of acid peptic disease.

C. Presence / absence of psychological factors (stress, anxiety).

D. Family history.

E. General examination and systematic examination in order to assess general condition of patient suitable for anesthesia and surgery.
   ➢ General condition.
   ➢ Blood pressure (mm Hg).
   ➢ Pulse rate (per min.).
   ➢ Respiratory rate (per min.).
➢ Anemia.

➢ Jaundice

➢ Urine output.

➢ Cardiovascular examination.

➢ Respiratory examination.

F. Local examination of abdomen to make clinical diagnosis and analysis of signs in order to evaluate incidence of each sign:-

➢ Board like rigidity.

➢ Tenderness.

➢ Guarding.

➢ Distension of abdomen.

➢ Masking of liver dullness.

G. Investigations

➢ Hemogram – Hb, TLC, DLC.

➢ Renai functions:

   a) B. Urea (mg%).

   b) S. Creatinine (mg%).
S. Electrolytes.
  c) S. Na⁺ (Meq/L).
  d) S. K⁺ (Meq/L).
Radiology.
Plain X-ray abdomen erect A.P. view including both lobes of diaphragm.
USG findings.

All patients were resuscitated with :-
  Intravenous fluids.
  Appropriate antibiotics.
  Nasogastric decompression by Ryles tube.
  Catheterization.

2. Pre-operative work up :-

All of the patients were operated under general anesthesia and preferable incision was midline.

During operation following points were recorded.

1. Size of perforation diameter.
2. Site of perforation.

4. Condition of omentum.

5. Any additional finding on exploration.

The peritoneal soiling was cleared by peritoneal lavage and lavage fluid was suctioned out, the definitive procedure then performed.

3. Post operative work up :-

➤ IV Fluids.

➤ IV antibiotics.

➤ Active Ryles tube suction.

➤ Assessment of vitals viz. Blood pressure, Pulse rate, Respiratory rate, Urine output.

➤ Assessment of abdomen to see board like rigidity, guarding.

Postoperative patients were kept nil orally along with Ryles tube aspiration till bowel sounds were heard and flatus appreciated by the patient. Drains were taken out according to the amount of drainage. Ryles tube was removed after
3-5 days. Patients were called up after 7 days, 15 days, 2 months and 6 months.

Upper GI endoscopy to take the antral mucosa biopsy, for biopsy ureas test when ever possible, in the post operative period.

In all the patients an upper G.I endoscopy was performed in variable post of period from 3 – 7 day and two specimens were obtained by biopsy foreceps from gastric antral mucosa.

Both the specimens were immediately put in two separate test tube. Containing rapid ureas test solution.

Both the test tube were kept at room temperature and the result in form of colour changes read within 40 hrs.

Results are read as positive when both the test tube shown colour changes within 48 hrs.

Point were followed for follow up Upper G.E. endoscopy and Antral mucosa biopsy within six months.