Discussion
DISCUSSION

AGE DISTRIBUTION

In the present study of 25 cases the highest incidence of perforated peptic ulcer was between 30 to 60 years, 72 (%) of patient fell in this group. A study done on 23 patients at EAST BIRMINGHAM HOSPITAL in 1981-82 showed the mean age of presentation of 56 years. This might be due to the different trends of this entity in the Western countries where the elderly patients are the primary victims. Various case series in India and abroad have mean age of presentation between 40-60 years, and in our study between 30-60 years.

College, Shimla in 1983-92, showed the mean age of presentations between 41-50 years, this is consistent with that of our study.
A study on perforated peptic ulcer done in JLN Medical College Ajmer RAJISTHAN, showed the maximum age incidence between 30-40 years, this figure is again compatible to our study.

GENDER DISTRIBUTION

In the present study the entire patient were male and none of the patient was female. Because of the small sample size and short duration over which the study has been done precludes any possible explanation for this.

A study in IG Medical College Shimla over the period of 10 years from 1983-1992, showed male to female ratio of 17:1. This ratio shows the very high incidence in male patients, which is shown in our study.

A prospective study done in JLN Medical College, AJMER (RAJASTHAN), on 43 patients, all the patients in that study were male and none of patient were female. Various other study conducted abroad confirms the increasing
incidence as well as a very high incidence of perforated peptic ulcer in male gender.

**H/O SMOKING**

In our study 64(%) patients were smoker majority of them were smoking 20 bîree /day and 36(%) were non-smoker. Although erratic, it seems that disease incidence is increasing among non-smokers. The association of smoking to peptic disease does not need emphasizing. These data’s shows the finding of multi factorial etiology of peptic ulcer disease. , Although our study shows a strong association of smoking and peptic perforation.

**H/O ALCOHOL INTAKE**

In our study out of 25 patients only 5 patients were alcoholic (20%), and 20 patients were non- alcoholic (80%). Out of 5 patients 3 patients were occasional drinkers.

No study available shows association between alcohol intake and peptic ulcer perforation.
In our study there is no more increased incidence of peptic ulcer perforation in smoker group than non-smoker group, so we could not ascribe a cause for this in our study.

**ECONOMIC STATUS**

In our study 19 patients (76%) were from poor socioeconomic status, and 6 patients were from average economic status.

So, in our study 76% patients were from poor socioeconomic status. So, in our study it seems that peptic ulcer perforation are more common among poor socioeconomic group patients.

This fact is validated from other studies, which have shown similar association between poor economic status and peptic ulcer perforation.

**FOOD HABITS**

In our study 60% patients were vegetarians and 40% patients were non vegetarians, so on conclusive evidence can be drawn from these data's.
LIFE STYLE

In our study 60% patients were from moderate worker and 40% patients were from hard worker group.

So from these data’s no conclusive evidence can be drawn from this study.

EDUCATION STATUS

In our study only 2 patients were educated above 10th class rest 23 patients (92%) were poorly educated and most of them are non-educated.

So from these data’s it seems that perforated peptic ulcer is more common in poorly educated and patients from poor socioeconomic status.

OCCUPATION

In this study 23 (92%) patients were farmer. So, from above data’s can be safely said that in Bundelkhand region the perforation is more common in farmers with poor economic status and poor education status.
ASSOCIATION WITH OTHER MEDICAL PROBLEMS

In our study only 1(4%) patient was suffering from Tuberculosis of lung and rest were non-tubercular. Only 3(12%) patients were hypertensive and rest 22(88%) patients were normotensive.

No patient was suffering from Ischimic heart disease and Diabetes mellitus.

So from above mentioned data's it seems that these diseases have nothing to do with perforated peptic ulcer, they are no more common in perforated peptic ulcer than from general population.

SIZE OF PERFORATION

In our study size of perforation was less than 1 cm in 15(60%) patients and 1-2 cm in 8(32%) patients, only 2(8%) patients were having perforation size more than 2 cm.
RADIOLOGICAL FEATURES

In this study all the cases were having gas under diaphragm in there, x-ray abdomen erect view.

In one study conducted in J.L.N. Medical College Ajmer 8.25 patients plain skiagram abdomem in erect view did not demonstrated free gas under diaphragm.

The demonstration of pneumoperitonium following perforated viscus is however not invariable and most series show that in only 75-80 of perforation is free gas demonstration. A number of reason for this have been suggested including:-

1- Sealing of perforation.

2- Lack of gas, at the site of perforation.

3- Adhesion around perforation.

4- Faulty technique.

However radiographic technique and positioning is also important and it is recommended that a patient should
be in position for 10 mins, prior to film taken for it takes this
time for free gas to rise to highest point in the abdomen,
however it is not possible in abdominal catastrophe and it is
seldom practiced by the radiologist.

If left lateral decubitus projection is included, this
yield can be increased up to 90%, which is similar to
sensitivity of U.S.G to demonstrate pneumoperitonium.

Relation between H. pylori and perforated ulcer.

RESULTS OF BIOPSY UREASE TEST

In our study out of 25 patients 24 (96%) patients were
positive for biopsy urease test.

Metzger et al study reported a prevalence of 73% of H pylori
infection in perforated peptic ulcer.

Papaziogas B, Pavlidis T, et al reported a prevalence of
62.5%of H pylori in perforated peptic ulcer.

Annals of surgery 231(2); 153-158, feb 2000,

Ng, Enders K.W.MD, LAM, Y.H.MD et al reported a
prevalence of 81% in perforated peptic ulcer.
Department of gastroenterology, PG institute of medical education and research, Chandigarh, India. Conducted study on 45 pts, 15 (34%) pts were in group of perforated peptic ulcer, none of them tested positive for H. pylori infection.

In our study results are very different from the other mentioned studies, quoted above.

So in our study perforated peptic ulcer are clearly associated with H. pylori infection as a strong etiological factor.

No patients returned back for follow up endoscopy and biopsy.