

Epidemiological Study of Perforation of Gastric Peptic Ulcer in Patients Admitted to Poursina Hospital

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Dear Editor,

Peptic ulcer disease due to high mortality and morbidity. Every year in United States, nearly 5 million people are infected, of which about 500,000 are new cases and 4 million have relapse [1]. The perforation of peptic ulcer is a serious complication of this disease [2]. There is no known specific etiology for peptic ulcer perforation [2]. Diagnosing peptic ulcer perforation is considered a challenge in most cases [2]. Twenty five percent of people with perforation had no complaint of peptic ulcer perforation, and perforation is their first symptom.

In this descriptive study, medical records of all patients with gastric peptic ulcers who had undergone surgery in 2011 were included in the study. To describe and determine the demographic characteristics, complications, and recurrence of perforation, the percentage of frequencies and 95% confidence interval were used of 100 patients with peptic ulcer perforation, 92% were men and 8% women. Most cases of perforation were in age range of 30 - 40 years old (24%) followed by 40 - 50 years (23%), respectively. Mean age of patients was 47.5% and 54% of them were cigarette and hookah smoker. Mortality rate was 5% in this study, most of which belonged to patients higher than 80 years of age and accompanying diseases. 64% had blood group A. Forty four percent had opium abuse (38.6% crack cocaine and 25% methamphetamine) and 13% had NSAID use.

Of all 100 patients with peptic ulcer perforation, most cases belonged to those aged between 30-40 years old (24%) and 40 - 50 years old (23%). Mean age was 47.5 years which is over the age limit mentioned in the textbooks [3] which requires more studies. In this study, the percentages of male and female patients were 92% and 8%, respectively. This finding is also in contradiction with the material in textbooks [3].

In our study, 54% of patients were cigarette smoker

which counts as a strong risk factor in development of gastric ulcer perforation as expressed in textbooks. In our study, 25% of patients were hookah smoker, but there was no evidence on effect of hookah on perforated peptic ulcer in textbooks [3] which requires more research in the field.

Mortality rate was about 5% in this study, mostly in those aged higher than 80 years. Therefore, age is considered as an outcome predictor. This finding is in compatible with studies which have introduced age as an effective and strong factor in outcome prediction after perforation [3]. Another finding of our effort was highest occurrence of peptic ulcer perforation in blood group A (64%). This finding clearly contradicts with the textbooks [3] which have reported the preference of blood group O. The most common type of ulcer was type 3 (76%) followed by type 1 (24%). This is consistent with other studies and the material contained in the textbooks [3]. In this study, the consumption of alcohol (10%) and NSAIDs (13%) were identified as risk factors which was consistent with other studies [3]. In this study, it was unveiled that 44% of patients had drug abuse; 29.5% opium intake, 25% methamphetamines and 38.6% cocaine crack. Only the use of latter is stated in the textbooks [3]. We suggest that the use of synthetic drugs can be a risk factor for peptic ulcer perforation. Further studies are required to investigate the relationship between methamphetamines and cocaine crack with perforated peptic ulcer.

References

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