ABSTRACT

Introduction:

Peritonitis due to hollow viscus perforation is one of the common cause for emergency ward admission under surgery department at RGGGH, Chennai. Peritonitis causes vary from the one requiring immediate surgical intervention to that requiring conservative management. The accurate diagnosis and management of Peritonitis is a challenge to every surgeon. The complex nature of surgical infections, the multifaceted aspects of treatment, and the increasing complexity of ICU support make evaluation of new diagnostic and therapeutic advances in this field very difficult. Scoring systems that provide objective descriptions of the patient’s conditions at specific points in the disease process aid our understanding of these problems. Hence this study is undertaken to study the effectiveness of Mannheim peritonitis index in predicting the outcome in peritonitis patients who presented to our hospital.

Objectives of the study:

To evaluate the prognostic value of MPI scoring system in patients with peritonitis due to hollow viscus perforation.
Materials & Methods:

This study is a clinical, prospective, observational and open study conducted at Rajiv Gandhi Government General Hospital, Madras Medical College, Chennai, during the period from April 2014 to September 2014. The data regarding patient particulars, diagnosis, investigations, and surgical procedures is collected in a specially designed case recording form and transferred to a master chart subjected to statistical methods like mean, standard deviation, proportion, percentage calculation and wherever necessary chi square test for proportion are used.

Results: In this study of 100 cases of secondary and tertiary peritonitis. The mean age of patients was 44.89 (SD 16.2) years ranging from 16 to 79 yrs. Majority(50%) of patients had MPI less than 21. 52.5% of patients with MPI score less than 21 developed complications. 45% of patients had complications with MPI score 21 to 27. Complications include minor(wound infection) and major(Respiratory, Renal, Circulatory, Post operative leak) categories. There was no mortality in patients with MPI less than 21, whereas those patients with MPI score more than 29 had the highest mortality rate of 76.9%. Patient with MPI
score from 21 to 29 had mortality rate of 23.1%. The outcome of the study is statistically significant by chi-square test with p Value <0.0001.

**Conclusion:**

MPI scoring system is simple score to apply; the determination of risk is available during operation and the surgeon can know about the possible outcome and the appropriate management can be decided. The Mannheim Peritonitis Index (MPI) is an useful and simple index which can be effectively used in prediction of outcome of patients presenting with Peritonitis due to Hollow Viscus perforation.

**Key words:** Peritonitis, age, duration, Mannheim’s peritonitis index.