International Journal of Advanced Research and Review

www.ijarr.in

HAEMOPERITONEUM - VOLUMETRIC ASSESSMENT IN DECISION MAKING

Dr. S. S. RATHORE

Professor Surgery, Dr. S. N. Medical College, Jodhpur (Rajasthan).

INTRODUCTION

Trauma is the emerging public health problem world wide. It is the leading cause of death and disability in the first four decade of life and is the third most common cause of death over all. 10% of trauma results in abdominal injuries which may be blunt in 84% and penetrating in 16%. Early detection of these life threatening injuries is most important factor in decreasing incidence of death due to intraabdominal trauma. [1]

Evaluation of patient who have sustained blunt trauma abdomen (BTA) may pose a significant diagnostic challenge to the most seasoned trauma surgeons.

Trauma surgeons must have the ability to detect the presence of intraabdominal injury across this entire spectrum. Due to recognised inadequacies of physical examination, trauma surgeons have to rely upon number of diagnostic adjuncts. Commonly used modalities include focused abdominal sonography for trauma (FAST), and computed tomography (CT). This study is mainly concerned with whether the amount of haemoperitoneum in first ultrasonography was helpful in decision making for exploration of blunt trauma abdomen patients.

MATERIAL AND METHOD

43 cases admitted due to blunt trauma abdomen in MDM hospital and MG hospital attached to the Dr. S N Medical College Jodhpur from January 2011 to December 2012 were studied.

Method of collection of data

-By direct interview with patient or patient relatives accompanying the patient and thorough clinical examination.
-Patient examined by FAST.
In this study we include those cases in whom FAST there was haemoperitoneum present and managed operatively. In our study we made baseline haemoperitoneum volume for FAST-
- <500 ml for mild,
- >500 ml for moderate,
- >1000ml for gross amount of haemoperitoneum.

Inclusion Criteria-

Patient presented with recent history of blunt trauma abdomen due to any cause.

Exclusion criteria-

Patient presenting with penetrating injury, gunshot or stab injury were excluded from the study.

OBSERVATION

Out of 18 cases with preoperative mild amount of haemoperitoneum intraoperative volume <500 ml was found in 8 (44%) cases and >500 ml was found in 10 (56%) cases. In preoperative moderate and gross amount of hemoperitoneum intraoperative amount of hemoperitoneum was found accordingly in all cases. Out of 18 cases with mild amount of hemoperitoneum 14 (77.7%) cases underwent laparotomy on the background of other factors (as shown in table 1). Out of 16 cases with preoperative moderate amount of haemoperitoneum only 2 (12.5%) cases underwent laparotomy on the background of gas under diaphragm and out of 9 cases with preoperative gross amount of hemoperitoneum decision making factor for operative management was also gas under diaphragm in 4(44.4%) cases. In all these 4 cases solid organ injury along with hollow viscus injury was present.

CONCLUSION

By this pilot study we reached to the conclusion that when in FAST there is mild amount of hemoperitoneum and erect X ray abdomen is normal and patient is haemodynamically stable it is better to manage the patient conservatively under close observation or go for further investigations like CT scan if available or serial ultrasonography. If in FAST there is moderate amount of hemoperitoneum and patient is clinically positive it is better to operate the patient without waiting for CT scan, and if there is gross amount of hemoperitoneum in FAST, overview is that patient should undergo laparotomy, because in our study in all cases of this category we found hemoperitoneum > 1000 ml with major solid organ injury or hollow viscus injury with solid organ injury.

BIBLIOGRAPHY

1. Soyen WS, LeteY, BozanH, Kartal M, Akyol AJ (2007): Accuracy of diagnosis of intra abdominal haemorrhage in blunt trauma abdomen trauma