

ABSTRACT

INTRODUCTON:

Ultrasound study of thorax in a trauma patient is termed as Extended Focused Assessment with Sonography for Trauma (EFAST). It's diagnostic accuracy is not yet well defined for it's clinical implication.

BACKGROUND:

The aim of the study is to check the accuracy of EFAST in diagnosing pneumothorax compared to chest x-ray and clinical examination in blunt injury chest patients keeping CT chest as standard investigation for confirmation.

METHODS:

It was a prospective study which included patients admitted in Govt. Rajaji hospital trauma care center with blunt injury chest for the period of one year. In this study all blunt injury chest patients were subjected to clinical examination, chest x-ray, EFAST and their results were collected. CT chest was done for confirmation of pneumothorax. Finally EFAST results were compared with chest x-ray and clinical findings.

RESULTS:

Totally 140 patients with blunt injury chest were evaluated. Among them 58 patients were diagnosed as having pneumothorax by CT. EFAST showed 42 positive cases of pneumothorax (sensitivity=72.41%), clinical examination showed 36 positive cases (sensitivity=62.07%), chest x-ray diagnosed only 10 cases of pneumothorax (sensitivity=17.24%).

CONCLUSION:

EFAST is an efficient modality of investigation that can be used to diagnose pneumothorax in trauma patients. It is cheap, available easily, portable, not radiation associated, can be done along with resuscitation process and more sensitive than chest x-ray or clinical examination in diagnosing pneumothorax makes it a suitable tool for surveying blunt chest trauma patients.