

# **THE ROLE OF LAPAROSCOPY IN BLUNT ABDOMINAL TRAUMA: DIAGNOSTIC, THERAPEUTIC OR BOTH?**

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## **Abstract**

### **BACKGROUND:**

The use of laparoscopy in blunt abdominal trauma is gaining popularity as a useful diagnostic tool to avoid unnecessary laparotomies where there is diagnostic dilemma. But the feasibility of using laparoscopy for therapeutic intervention in these patients has been debated. Even though recent case reports seem to suggest that these patients can be managed using laparoscopy, the practice is not yet widely adopted.

### **METHOD:**

A retrospective analysis of a prospectively collected data was done. All adult patients who presented with abdominal trauma and were offered laparoscopic surgery at Dr George Mukhari Academic Hospital (DGMAH) from 2012 to 2015 were reviewed. Data was retrieved from our departmental database and analysed using descriptive statistics.

### **RESULTS:**

A total of 318 patients were reviewed and 35 patients had blunt abdominal trauma and were included in the study. All the patients were offered laparoscopy. The median age was 30, with 91% of our patients males. The highest injury severity score calculated was 38. At least 77% of the patients were managed using laparoscopy. This includes 43% who had both diagnostic and therapeutic intervention and 34% who had only diagnostic laparoscopy. Eight patients were converted to open surgery mainly due to active bleeding and complex injuries. We did not have any non-therapeutic laparotomies. There was no documented procedure-related morbidity and mortality.

### **CONCLUSION:**

The positive outcomes seen from the study suggest that laparoscopy can be safe and feasible in both diagnostic and therapeutic interventions in carefully selected blunt

abdominal trauma patients. A conversion to open surgery should not be regarded as a failure but rather as a sign of mature and sound clinical judgement acknowledging the limitations of laparoscopy and/or the surgeon.

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