TRAUMATIC ABDOMINAL WALL HERNIA AND MANAGEMENT: ONE SIZE FITS ALL OR TAILORED APPROACH?

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Background

- Traumatic abdominal wall hernias are a rare complication of blunt abdominal trauma
- Lack of high volume studies evaluating incidence and management
- No standardized surgical approach at this time

Methods

- Prospectively maintained database to identify patients with traumatic abdominal wall hernias from 2021-2022
- Primary outcome was operative management
- Secondary outcomes included time to diagnosis, method of diagnosis, and post-operative outcomes

Results

- 81% (n=13/16) of traumatic abdominal wall hernias were secondary to blunt trauma
- Mean ISS score of 21
- Delay to diagnosis in 5 of 16 patients (31.3%)
- Exploratory laparotomy for 14 patients (87.5%)
- 11 cases had other traumatic injuries (eg. Stomach, bowel, diaphragm)
- Almost half of patients had post-operative complications

Results

Age, median, years (range)	32 (7-58)
Male, n (%)	9 (56.3%)
Penetrating, n (%)	2 (12.5%)
ISS, median (range)	21.3 (5-75)
Concomitant Injury, n (%)	10 (62.5%)
Hollow Viscus	10 (100%)
Solid Organ	0 (0%)
Surgical Intervention	16 (100%)
Diagnostic Laparoscopy	2 (12.5%)
Exploratory Laparotomy	14 (87.5%)
Hernia Repair	15 (93.8%)
Primary repair w/o Mesh	14 (87.5%)
Primary repair with Mesh	1 (6.3%)
Delayed Diagnosis (>12h)	5 (31.3%)
Post-operative Complications	7 (43.8%)
Wound dehiscence	3 (18.8%)
Wound Infection	1 (6.3%)
Hospital LOS, median days (range)	17.6 (1-49)
Overall mortality, n (%)	2 (12.5%)

Conclusions

- Need a high index of suspicion for this type of injury following high energy mechanisms or severe blunt trauma
- Hollow viscus injury should raise concern for potential traumatic abdominal wall hernia
- Delay in diagnosis common
- All patients underwent surgical intervention, majority undergoing primary repair of traumatic hernia without mesh
- Further study is warranted to determine a standardized approach to traumatic abdominal wall hernia

References

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