Impalement Injury of the Lower Abdomen and Pelvis - An Anaesthetist's Role

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1. Introduction

Managing penetrating injury is highly challenging because of the urgency of surgery and associated hemodynamic instabilities. So close monitoring before, during and after the surgery are vital.

2. Case Report

We report a 45 year old female sustaining penetrating injury of the lower abdomen and pelvis with a metallic rod after an RTA. It was a through and through injury where the rod entered the pelvis just lateral to the right mid inguinal point, traversed the abdomen and made an exit through the left gluteal region.



3. In Emergency Room

Patient was conscious, coherent and obeying commands. She was pale and slightly dyspneic due to severe pain.

Vitals: BP: 76/50mmhg; HR: 135bpm; Spo2: 96% at room air

- Two 18G cannulas secured.
- Samples for blood investigations and cross matching sent.
- IV fluids- 2 units Ringer Lactate started.
- IV antibiotics and TT dose given.
- Analgesics: IV Fentanyl 60mcg + IV Tramadol 100mg

- Complete patient assessment was done
- RS B/L air entry + with no crepitus
- CVS S1 S2 + no murmurs, low volume and high rate
- GIT tenderness with guarding present
- GUT no external injuries but no urine output
- Investigations were all within normal range
- FAST scan revealed fluid in Morrison Pouch and Pouch of Douglas.

4. In Operation Theatre

- Positioning
- Standard monitors connected with IABP and CVP monitoring.
- RAPID SEOUENCE INTUBATION: (inducing agent- inj. Ketamine 100mg, MR – inj. Succinylcholine 100mg).
- Maintenance: O2:N2o:Sevo in 2:3:1 and vecuronium as relaxant.
- INTRA OP FINDINGS:
- Anterior wall bladder injury
- Complete section of the left ureter
- Left internal iliac artery section
- Artery ligated and organs repaired
- Surgery time 6 hrs
- Blood loss > 4:L
- Intra operative ABG analysis done
- FLUID RESUSCITATION: colloids: 2L,crystalloids 1L; 4 units PRBCs; 4 units FFPs; 4 units platelets
- Tranexamic acid 1g
- ICU: elective ventilation for 12hrs and later extubated.

5. Conclusion

Anaesthetist provide continuity of care from ER to OT to ICU and in the later phase of pain management.

References

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