

Successful Treatment of Major Abdominal Trauma in a 9-year-old Male due to Bomb Explosion

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Abstract

The present case report describes a pediatric patient that sustained and survived major abdominal trauma due to an open-air explosion during the Syrian civil war. A 9-year-old male patient was brought to our hospital's paediatric emergency department after a bomb explosion that occurred 8 hours prior to presentation. The patient had a severe flap-like skin defect that extended from the below the umbilicus to the right femur. The defect was embedded with multiple stones, plastic, and soil fragments of varying size. Debridement of the anterior abdominal wall was performed, followed by exploratory laparotomy. Multiple sites of perforation of the small bowel were resected, and anastomosis was performed. Vacuum-assisted closure (VAC) was applied to the large wound area. The VAC dressing was changed every 3 days. Granulation tissue developed post-operatively after 26 days and the defect was repaired using skin grafts harvested from the patient's left leg. The patient was considered fully recovered and was discharged 34 days post-surgery. The presented case shows that despite the severity of the patient's major abdominal injuries, rapid wound debridement, exploratory laparotomy, VAC therapy and a multidisciplinary approach are crucial in preventing death and achieving a full recovery.

Key words: Abdominal trauma, bomb explosions, children