

KOMPLEKSNA PENETRANTNA OŠTEĆENJA UNUTRAŠNJIH ORGANA KOD DECE: HIRURŠKE I SISTEMSKE IMPLIKACIJE

COMPLEX PENETRATING INJURIES OF INTERNAL ORGANS IN CHILDREN: SURGICAL AND SYSTEMIC IMPLICATIONS

Zlatan Elek^{1,2}, Mladen Kasalović^{1,2}, Gojko Igrutinović^{1,2}

1 Medicinski fakultet, Univerzitet u Prištini, Kosovska Mitrovica, Srbija

2 Kliničko bolnički centar Kosovska Mitrovica, Kosovska Mitrovica, Srbija

SAŽETAK

Uvod: Prostrelji abdomena predstavljaju ozbiljan oblik penetrantne traume koji često dovodi do višestrukih povreda vitalnih struktura unutar trbušne šupljine. Zbrinjavanje ovakvih pacijenata zahteva multidisciplinarni pristup, brzu stabilizaciju hemodinamskih parametara i hitnu hiruršku intervenciju. Ishod zavisi od broja i težine povreda, vremena proteklog do operacije, kao i efikasnosti postoperativne nege.

Prikaz slučaja: Prvi pacijent, muškarac star 36 godina, primljen je nakon prostrelne povrede trbuha zadobijene vatrenim oružjem iz neposredne blizine. Pri prijemu bio je konfuzan, tahikardan (HR 132/min), hipotenzivan (TA 80/60 mmHg), sa rigidnim abdomenom i izraženim znakovima akutnog abdomena. Urađena je brza reanimacija uz nadoknadu tečnosti i krvi, nakon čega je sprovedena hitna medijalna laparotomija. Intraoperativno su pronađene višestruke perforacije jejunuma, aktivno krvarenje iz mezenterijalnih sudova i hematoperitoneum sa više od 1500 ml krvi. Izvršena je resekcija segmenta tankog creva u dužini od 80 cm sa termino-terminalnom anastomozom, hemostaza i ispiranje peritonealne šupljine. Pacijent je postoperativno zbrinut u jedinici intenzivne nege, a oporavak je protekao bez znakova peritonitisa ili fistulacije. Drugi pacijent, muškarac star 29 godina, takođe je ranjen vatrenim oružjem, ali u stabilnijem opštem stanju. Po prijemu je bio afebrilan, orijentisan, sa bolom lokalizovanim u desnom kvadrantu abdomena. Laboratorijski su dominirale blaga leukocitoza i povišeni CRP. Ultrazvuk i CT abdomena ukazali su na prisutnost slobodne tečnosti u abdomenu i vazdušnih mehurića u blizini hepaticne fleksure. Indikovana je eksplorativna laparotomija tokom koje je ustanovljena linearna povreda kapsule desnog jetrenog režnja i jedinstvena perforacija transverzalnog kolona. Izvršena je primarna sutura creva, hemostaza jetre i postavljanje drenova. Pacijent je lečen antibiotiski i parenteralno, sa urednim postoperativnim tokom i otpušten je iz bolnice devetog dana.

Zaključak: Oba prikazana slučaja potvrđuju značaj individualnog pristupa u zbrinjavanju prostrelnog oštećenja trbušnih organa. Rano prepoznavanje stepena povrede, adekvatna preoperativna priprema i blagovremena laparotomija doprinose smanjenju smrtnosti i komplikacija. Uvođenje protokola za upravljanje traumom i dostupnost obučenog hirurškog tima od suštinskog su značaja za ishod lečenja ovih pacijenata.

Ključne reči: penetrantna trauma, resekcija creva, povreda jetre, laparotomija

ABSTRACT

Introduction: Abdominal lacerations represent a serious form of penetrating trauma that often leads to multiple injuries to vital structures within the abdominal cavity. Treatment of such patients requires a multidisciplinary approach, rapid stabilization of hemodynamic parameters, and urgent surgical intervention. The outcome depends on the number and severity of injuries, the time elapsed before surgery, as well as the effectiveness of postoperative care.

Case report: The first patient, a 36-year-old man, was admitted after a gunshot wound to the abdomen caused by a firearm at close range. On admission, he was confused, tachycardic (HR 132/min), hypotensive (TA 80/60 mmHg), with a rigid abdomen and pronounced signs of acute abdomen. Rapid resuscitation was performed with fluid and blood replacement, after which an emergency medial laparotomy was performed. Intraoperatively, multiple perforations of the jejunum, active bleeding from the mesenteric vessels, and hematoperitoneum with more than 1500 ml of blood were found. An 80 cm long segment of the small intestine was resected with end-to-terminal anastomosis, hemostasis, and lavage of the peritoneal cavity. The patient was treated postoperatively in the intensive care unit, and his recovery was uneventful without signs of peritonitis or fistulation. The second patient, a 29-year-old man, was also wounded by a gunshot but in a more stable general condition. Upon admission, he was afebrile, oriented, with pain localized in the right quadrant of the abdomen. Laboratory tests were dominated by mild leukocytosis and elevated CRP. Abdominal ultrasound and CT showed the presence of free fluid in the abdomen and air bubbles near the hepatic flexure. An exploratory laparotomy was indicated, during which a linear injury of the capsule of the right liver lobe and a unique perforation of the transverse colon were established. Primary intestinal suture, hemostasis of the liver, and placement of drains were performed. The patient was treated with antibiotics and parenterally, with a normal postoperative course, and was discharged from the hospital on the ninth day.

Conclusion: Both presented cases confirm the importance of an individual approach in the treatment of gunshot damage to the abdominal organs. Early recognition of the degree of injury, adequate preoperative preparation, and timely laparotomy contribute to the reduction of mortality and complications. Implementation of a trauma management protocol and the availability of a trained surgical team are essential to the outcome of these patients.

Key words: penetrating trauma, bowel resection, liver injury, laparotomy