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## **Extraperitoneal pelvic packing (EPP) as a way of surgical hemostasis in unstable pelvic fractures**

### **Introduction**

The incidence of pelvic injuries with combined injuries is 10.0-42.0%, with unstable pelvic ring injuries occurring in 39.0-81.4%.

**Objective.** To assess the clinical efficacy of the extraperitoneal pelvic tamponade to ensure hemostasis in victims with unstable pelvic ring injuries and signs of unstable hemodynamics.

**Materials and methods.** The results of treatment of 19 victims with polytrauma, unstable pelvic ring injuries and signs of unstable hemodynamics by the level of systolic blood pressure (MAP) in two trauma center 1 level are analyzed.

In the study group included victims with ongoing intrapelvic hemorrhage, as the main source of acute blood loss, and competing for non-pelvic localization - 11 (57.9%). Two or more life-threatening effects of damage developed in 12 (63.2%) victims.

**The results and conclusions.**

The average time from admission to tamponade was  $62.1 \pm 24.3$  minutes, the volume of intraoperative blood loss was  $540.0 \pm 343.9$  ml, and the surgery time was  $56.8 \pm 23.5$  min. The extraperitoneal packing of the pelvis made it possible to achieve the final cessation of ongoing intrapelvic hemorrhage in 14 (73.7%) victims. CT of the pelvis and abdomen with intravenous contrast enhancement was used in 7 cases, continued intrapelvic bleeding as extravasation of the contrast agent was diagnosed in two patients.

Seven victims (36.8%) died during the first two weeks after injury from infectious complications. The average bed-day in the intensive care unit was  $14.0 \pm 1.7$  days, the average duration of inpatient treatment was  $63.3 \pm 36.1$  days.

### **Conclusion**

1. In case of severe combined injury of the pelvis, the EPP in combination with the mechanical stabilization of the damaged pelvic ring can be actively used in critically ill victims.
2. CT of the pelvis with intravenous contrast enhancement may be carried out by the victim with shock and unstable hemodynamics.
3. The performance of EPP does not preclude the subsequent performance of angiography, on the contrary, it is usually shown.
4. The EPP method for controlling pelvic hemorrhage can be actively used in conditions of limited resources of the forces and facilities of the medical service