

# **The use of percutaneous interventions in the treatment of intra-abdominal postoperative complications in emergency abdominal surgery**

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**Issue:** There is a worldwide trend of using of minimally invasive techniques in abdominal surgery. Despite considerable medical advances, relaparotomy, according to the literature, is the "second hit" to the patient, which can lead to a complete depletion of the compensatory mechanisms of organism and deaths. Reduction of the volume of interventions can result decreasing of postoperative morbidity and mortality.

**Aim:** Evaluate the efficacy of percutaneous operations under ultrasound guiding in elimination postoperative complications in patients with previous urgent laparotomy.

**Materials and methods:** Sins 2011 in Kharkiv Regional Hospital 54 patients (from 26 to 57 years old) received treatment of postoperative complications after initial urgent laparotomy. In treatment 29 of them were used minimally invasive procedures (study group). To compare the effectiveness of treatment analyzed medical records of 25 patients who were performed open surgery (comparison group).

**Results:** Intervention always was performed by "hands free" technique. That allowed achieving covered formations by a curved path. Intervention always was performed by "hands free" technique. That allowed achieving covered formations by a curved path. Puncture was performed in liquid formation of small and medium size (24 patients), the content was aspirated and the cavity was

washed with an antiseptic solution. In case of more than 500 ml cavity, and purulent contents preference was given to percutaneous drainage. Cavities which contained a large amount of necrotic debris were washed at least 4 times a day. In postoperative period was checked the amount pouring liquid, were run bacteriological and cytological tests, ultrasound monitoring of the cavity.

Drainage time was determined strictly individual and depended on the amount of liquid, term of cavity clearing and the volume of the residual cavity.

In the postoperative period in 2 (10.5%) patients had a translocation of drainage, which required redrainage, which did not result in grade of the severity. In 2 (10.5%) patients open surgery was required. There were not deaths nor other complications in this group.

Complications in the comparison group after relaparotomy occurred in 10 (40%) patients and wick led to the death in 2 (8%) cases.

**Conclusion:** The use of percutaneous operations under ultrasound guiding can significantly reduce the incidence of postoperative complications and mortality in patients with post-operative complications after initial urgent laparotomy.