



Trauma Laparoscopy: is there Need to have a Standardization?

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The introduction of laparoscopy in trauma has been gradually gaining acceptance, albeit cautiously, due to the high rate of previously unnoticed injuries reported in the past (41-77%) [1,2]. With advances in technology and surgical technique, unnoticed injuries have decreased significantly, in recent studies, from 13% to 0.12% [3,4], allowing for its expanded use in screening, diagnosis, and therapy [5].

The success of the laparoscopic procedure relies on the correct patient selection, who should be hemodynamically normal or remain stable after volume resuscitation [6]. Although unstable patients can also undergo laparoscopy [7], the indication still requires more comprehensive studies. Hemodynamic stability, coupled with the surgeon's experience, enables the surgical treatment, even if initial, through the laparoscopic approach in all cases of penetrating abdominal trauma [3].

Current literature provides limited evidence regarding the standardization of diagnostic laparoscopy in penetrating abdominal trauma [5]. Few studies describe the detailed exploration technique, leaving the methodology unsystematized and varying according to each surgeon's experience.

In contrast, in other situations such as minimally invasive surgery for inguinal hernia, cholecystectomy, and acute appendicitis, there are established protocols to prevent iatrogenic injuries and perform surgery with maximum safety and effectiveness (reference to the "10 rules for hernia" and "critical view of safety in cholecystectomy...").

A study by KAWAHARA, et al. (2009) [8] proposed a systematization of exploration, focusing primarily on the paradigm shift in puncture techniques. However, the sequence of exploration in this study differs from the proposals by KOTO, et al. (2018) [5] and URANU and DORR (2010) [9], which advocate for a systematic exploration, following a specific sequence of regions.

Nevertheless, even in these studies, there is a lack of information or limited consensus regarding the standardization pattern, puncture site, pneumoperitoneum volume, trocar placement, patient positioning on the surgical table, and prioritization in repairing diagnosed injuries. These characteristics become necessary as diagnostic laparoscopy demands therapeutic decisions during the diagnostic phase.

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