Is Clinical Evaluation Sufficient for Decision Making in Patients With Penetrating Abdominal Trauma?

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Dear Editor,

In the article entitled “Conservative management of anterior abdominal penetrating trauma”, researchers have divided patients with anterior abdominal stab wounds into two groups. Those who were diagnosed with, or had obvious signs of peritonitis, and who underwent laparotomy in the first several hours after arrival to the surgery department, were placed in one group, while the second group comprised those patients who were initially stable and showed no obvious signs of peritonitis and they were only kept under observation.

All patients who were under observation were clinically examined and underwent complete blood count (CBC), as well as simple abdominal X-ray. Of this group, composed of 45 patients, 27 were forced into laparotomy due to signs of peritonitis or falls in blood pressure and hemoglobin levels. In these patients, computed tomography (CT) scan and diagnostic peritoneal lavage (DPL) were not used for review and decision making, regarding their surgeries. No pathologic lesions were found in 50% of patients who underwent laparotomy. Patients chosen for surgery in this group entered the operation theatre after 6 hours, on average. Of the 50% of those patients who had positive findings, 24% presented colon perforation. On one hand, it can be concluded that, if a patient presents with peritonitis and intra-abdominal bleeding early on, it would offer sufficient clinical evidence for decision making, meaning that there is no need for using other tools, such as the CT scan, which itself can generate increased costs to the health care system. On the other hand, perhaps by using the CT scan and DPL, the surgeon could decide on not performing laparotomy on the 50% of patients who show no positive findings. However, concerning these patients, the question remains if, in case the CT or DPL were negative, could the surgeon still decide to continue conservative treatment, considering the clinical state of the patient? Therefore, this system and investigation cannot be used to conclude that it is better to use CT and DP, because it can reduce the percentage of negative laparotomy. However, if we want better results, we must investigate two groups with the same initial conditions, using CT and DPL for decision making, in one group, and not using CT and DPL, in the other. Consequently, we would be able to determine how much these paraclinical parameters can help in the surgeon’s correct decision making.

Other researchers have also concluded that, while it is possible to treat a number of patients with trauma conservatively (1, 2), it should not cause delays in their treatment and surgery (1, 3) and the use of paraclinical parameters and/or laparoscopy has not caused any changes in the treatment strategy for these patients (2, 3).

References