



Comment on: Rectal trauma injuries: outcomes from the U.S. National Trauma Data Bank By K.J. Gash et al

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Dear Sir,

I read with interest the article by Gash et al. and the editorial by RW Schroll both published in *Tech Coloproctol* [1, 2]. Both authors focused on several controversial issues in the challenging management of colorectal trauma to be considered in future investigations.

Rectal lesions in a poly-trauma patient increase the severity score and incidence of complications [3]. Multivisceral involvement is frequent and requires a multidisciplinary approach. In case of pelvic trauma, it is difficult to understand how an isolated lesion of the extraperitoneal rectum may occur as in 52.8% of the cases reported by Gash. In this respect, straddle type injuries or impalement have been shown to be the predominant mechanism of rectal trauma and have been given special attention in the literature due to their diagnostic and therapeutic problems [3–6]. These kinds of trauma can result in isolated, extraperitoneal rectal lesions, although anal sphincter and urogenital lesions are likely to occur. In such cases, debridement and rectal irrigation have been shown to reduce septic complications [4]; thus, rectal lesions may be repaired trans-anally, sometimes avoiding stoma formation. In the article by Gash, the mechanisms of trauma are not fully elucidated; blunt-straddle or penetrating-impalement injuries may result in lesions of the extraperitoneal rectum, especially in the young adolescent in consequence of sport or car crashes [5]. Conservative measures may be successfully employed in case of small or doubtful lesions or in case of rectal wall hematoma. Young age and stable condition of the patients induced the surgeons to adopt a policy of “wait and see” in case of blunt trauma resulting in 56.6% of conservative treatment (no operation no stoma). But this seems contradictory with the higher

morbidity and mortality in this group of patients. The high ISS score may be a cause of adverse events (cranio-facial, spinal cord, thoracic), but then, could delay in diagnosis of rectal lesions and appropriate treatment account for these data? It would be interesting to know the percentage of patients operated on after a failed conservative approach or due to delayed diagnosis of rectal lesions. Blunt, pelvic or straddle trauma can result in rectal tears by means of a blowout mechanism as in cases of high-speed perineal impact on water [6] and such lesions may not easily be seen in early imaging studies but require proctoscopy, preferably performed under anaesthesia, to be well visualized [7]. Therefore, in the presence of blunt pelvic trauma, an early, active search of rectal (and anal sphincter) lesions should be part of diagnostic screening. This approach may contribute to reducing morbidity and mortality in this particular group of patients.

We may expect that some colostomies were the consequence of postoperative morbidity and reoperation (dehiscence, peritonitis) and not the surgeon’s choice. In addition, planned reoperations are likely to occur in case of open abdomen for intra-abdominal hypertension or second look to rule out ischemia. These data, if available, would be very interesting to analyze.

Compliance with ethical standards

Conflict of interest The author declares that he has no conflict of interest.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent For this type of study formal consent is not required.

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