

An algorithm to avoid missed open-book pelvic fractures

Nermine Habib

Lugano Regional Hospital, Switzerland

Background: In polytrauma patients, to limit the pelvic space favoring internal bleeding, the use of pelvic binders is now a standard practice. In case of external pelvic binder placement with anatomic reduction of the symphyseal and sacroiliac joints, delayed diagnosis and missed injuries could occur.

Aim: The aim of this study was to document the risk of missed diagnosis, as well as to identify a possible algorithm for optimal management of traumatized patients with pelvic binders, in order to reach an early diagnosis of pelvic fractures without additional risks.

Case Report: We report three cases of open book pelvic fractures that were initially missed. The external pelvic

binders applied had adequately reduced the fractures. The computed tomography on arrival excluded a diastasis of the symphysis pubis. On removal of the pelvic binder and repetition of the radiological imaging, the fractures were evidenced.

Conclusions: We have accordingly created an algorithm for polytrauma patients to determine when the pelvic binder should be released prior to radiological imaging and when repeated radiological imaging should be done. The use of this algorithm in trauma centers will help reduce the number of missed injuries and the numbers of late diagnoses as well as increase the patient survival rates.

e: nermine.emad@gmail.com