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WHICH PELVIC FRACTURES ARE LIFE-THREATENING?

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Orthopedic management of a trauma patient presenting with a pelvic fracture is maximized by appropriate resuscitation techniques based on the “ABCs” of resuscitation. Additional resuscitative measures can also be delivered to minimize the effects of associated pelvic hemorrhage.

Although exsanguination from an isolated pelvic injury is rarely singularly responsible for death, pelvic hemorrhage associated with other injuries is often a lethal combination. Therefore, while a high-risk pelvic fracture (grossly unstable, greatly displaced, unstable vital signs) needs immediate intervention (stabilization, angiography), so does a moderate-risk pelvic injury in a multiply injured patient. This clinical approach can be considered as minimizing the deleterious effects of the pelvic injury on the overall patient. In such a case, it is the orthopedist’s task to take the effects of the pelvic injury “out of the equation,” for example by rapid application of a pelvic binder to an unstable pelvis with an increased diameter as a trauma workup progresses.

Soon after the overall patient assessment and treatment of airway, breathing, and circulation has been performed, assessment of pelvic stability and injury mechanism should follow. This includes 1) manual and 2) radiographic assessment, and 3) a quick review of the circumstances of the injury. These three points are the most accurate determination of a life-threatening pelvic injury.

Assessment of Pelvic Injury

With the patient supine on a resuscitation litter permitting plain x-ray, the examiner will gently manipulate the pelvis via the anterior superior iliac spines toward and away from the midline. Detectable motion or significant pain should dramatically heighten