

Pelvic Trauma and Its Importance in the Treatment of Patients With Multiple Injuries



Francisco Eduardo Silva*

Universidade Federal do Rio de Janeiro, South America

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*Corresponding author: Francisco Eduardo Silva, Universidade Federal do Rio de Janeiro, Rua Bolívar, 54 apto 402 - Copacabana, Rio de Janeiro, Brazil, South America, Tel: +55 21 98408-9924; Email: dr.francisco.eduardo@gmail.com

Editorial

The importance of identifying and treating pelvic trauma is due to the fact that it presents about 3% of all skeletal injuries with an overall mortality ranging from 5 to 16% of patients with multiples injuries. The mortality rate of patients with hemodynamic instability due to severe fracture of pelvic bones may reach up to 40-60%, despite an effective multidisciplinary treatment approach. The unstable fracture of the pelvic ring is predominantly caused by closed trauma with high kinetic energy and is associated with a high risk of mortality. Many cases of closed pelvic trauma with high kinetic energy may present a high risk of associated lesions that influence the final outcome in mortality causing impact on the survival rates of these patients [1,2]. Some risk factors are associated with the severity of pelvic trauma such as osteoporosis, smoking, previous hysterectomy, patients over 60 years old, and patients tending to fall from one's height. Lesions associated with bleeding are almost always venous in origin and will require blood transfusion.

The sacroiliac disjunction, prolonged hypotension, and female gender are predictors of bleeding requiring angioembolization. In pelvic trauma, the occurrence of associated lesions of internal organs such as the urethra, rectum, vagina, bladder, injury of external iliac vessels and nerve lesions may be associated. In many cases of closed pelvic trauma, retroperitoneal hemorrhage is due to bony and venous lesions, but may also be secondary to arterial lesions. Arterial lesions are infrequent in pelvic fracture, but are associated with refractory hemorrhagic shock and high mortality and require specific treatment such as angiographic embolization. In hemodynamic instability patients with pelvic bone fractures, treatment remains a major challenge for the surgeon. The trauma surgeon needs to decide between several therapeutic options that include: external fixation of the fracture of the pelvic ring bones, laparotomy to control intra-abdominal hemorrhage, angiography

and embolization, preperitoneal pelvic packing, as well as control of bleeding in other sites such as exposed fractures and chest injury [3].

Preperitoneal pelvic packing is an effective measure in containing pelvic bleeding hemorrhage. Preperitoneal pelvic packing in addition to reducing the need for blood transfusion is effective in pelvic bleeding especially when associated with external stabilization of the pelvis at sites where angioembolization is not accessible [4,5]. Early and late complications have a great impact on patients' morbidity and quality of life. Fecal and urinary incontinence, impotence, dyspareunia, locomotion deficiency, perineal and pelvic abscess, chronic pain and vascular complications such as embolism or thrombosis are important late complications of pelvic trauma. Most of the deaths (44.7%) occur on the day of the trauma and the main factors are: age > 65 years, pelvic instability, open wound contamination, rectum lesion, number of transfused blood units, associated lesions, acidosis, hypothermia and coagulopathy.

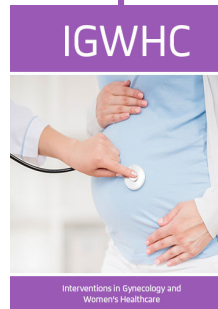
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