

Projekttopslag: Studerende søges til prægraduat forskningsår på Ortopædkirurgisk Afdeling OUH

Title

Evaluation of indications for stabilizing the transpubic fracture component in B- and C type pelvic fractures based on 2 different fracture registries in Denmark and Germany

Hypothesis

1. The stabilization of the anterior pelvic ring does not result in more secondary complications if the fracture affects exclusively the pubic anterior ring.
2. There are more primary complications associated to the combined stabilization of the anterior and posterior pelvic ring compared to the simple dorsal stabilization.

Introduction

Although the mortality of pelvic fractures decreased during the last years, these injuries are still a problem and associated with a decreased quality of life and an overall death rate of around 4%. Although the mortality seems not to depend on age, it increases with the degree of instability. Frequently, traumatic pelvic ring instabilities are seen in multiple injured patients [1]. Anterior external stabilization is generally regarded as a quick and easily applied form of fixation and very suitable in emergency situations. This results in greater stability and decreases the pelvic volume to aid hemorrhage control. Moreover, external fixation of the pelvis is often used to definitely stabilize the anterior pelvic ring aiming to augment stability to the pelvis even after posterior reduction and fixation. Unfortunately, the application of the anterior pelvic fixator is not without complications. There are described pin loosening, secondary losses of reduction, superficial and deep infections, nerve injuries (especially n. cutaneous lateralis), impingement with reduction of mobility and skin problems [2,3]. Considering these important issues reaching an incidence up to 62%, a critical evaluation of the indication for this fixation technique is necessary.

Research questions

1. Which procedures are used to stabilize the anterior pelvic ring in type B and C-fractures (Tile classification, rotational and vertical instable fractures)?
2. Is there a significant difference between the countries Denmark and Germany based on the analysis of the Danish Fracture Database (DFDB) and the German Pelvic Registry (GPTRI)?
3. Is it possible to estimate and possibly to compare data quality?
4. Do these procedures have different complication rates?
5. Are there more complications if the operations were carried out during duty times?
6. Are there more specific complications and complications in general if the anterior pelvic ring was also stabilized?
7. Are there specific indications for external stabilization in the acute phase?

Kontakt

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