



## Original Article

## The epidemiology of pelvis and acetabular fractures in Kuwait

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## ABSTRACT

**Objectives:** Pelvis fractures (PF) and acetabular fractures (AF) are major challenges in orthopedics. Epidemiological figures are not available for Kuwait, making it difficult to evaluate the success of future plans. This study aimed to analyze the epidemiology of pelvis and AF in Kuwait.**Methods:** A retrospective cross-sectional design was used by reviewing the Database of PF and AF of level II trauma center, Kuwait.**Results:** From October 2018 to September 2019, 2046 patients were admitted to the orthopedic wards of our hospital. PF prevalence was 3.66%; mean age (standard deviation) was 37.56 (18.09) years, and 74.5% were men. AF prevalence was 1.71%; mean age was 28.08 (17.77) years, and 71.6% were men. The most frequent mechanism of injury was motor vehicle accidents. Using the OTA/AO classification, the most frequent fracture of the PF was B1.1 fractures at 60.7%, and A1 fractures for AF at 80.0%. PF and AF were associated with other injuries in 54.4% and 38.2%, respectively. In terms of management, 24.3% of the patients with PF were managed operatively and the reported complications were metal failure (2.7%), post-operative infection (1.4%), and wound dehiscence (1.4%). The management of AF was operative in 54.3%, and the identified complication was only metal failure (2.9%). The mortality of PF was 2.7% and 0.0% for AF. Variables related to the ICU length of stay, mortality, and post-operative complications were explored.**Conclusion:** The epidemiological figures explored could help determine PF and AF's burden in Kuwait and direct future management and preventive plans.**Keywords:** Acetabulum, Fractures, Kuwait, Pelvis, Prevalence

## INTRODUCTION

Traumatic injuries are a challenging health issue with significant morbidity, mortality, and socioeconomic burdens on both personal and society level.<sup>[1,2]</sup> It is one of the leading sources of death, causing 5.8 million deaths annually and accounting for 10% of the world's death rate.<sup>[3,4]</sup> Pelvis fractures (PF) form 3% to 10% of traumatic injuries, one of the major critical issues in orthopedics, and is often associated with life-threatening injuries.<sup>[5,6]</sup> In motor vehicle accidents (MVA), PF are the third most common cause of death, with mortality rates of 3–60%, and an incidence rate of 4.34/10 000 person/year.<sup>[5,7-9]</sup> Acetabular fractures (AF) are not common,**How to cite this article:** Alhadhoud MA, Alsiri NF, Agamia HA. The epidemiology of pelvis and acetabular fractures in Kuwait. J Musculoskelet Surg Res 2021;5(3):187-95.

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