

Camel related head injury in United Arab Emirates

Ashraf F Hefny¹, Mohamed A Hefny², Mohamed A Al-Ali³, Hussam M Mousa¹

¹ Department of Surgery, College of Medicine and Health Sciences, UAE University, Al Ain Hospital, Al-Ain, United Arab Emirates: ahefny@uaeu.ac.ae

² Department of Surgery, Faculty of Medicine, Ain Shams University, Cairo, Egypt

³ Department of Otolaryngology, College of Medicine and Health Sciences, UAE University, Al Ain Hospital, Al-Ain, United Arab Emirates

Abstract

Background and aims:

Injury caused by large animals vary according to the regional distribution of the animals, their behavior, and relationship to humans. Camels causes 83.3% of animal related injuries at UAE. Trauma patients with head injury have higher mortality compared with those with no head injury. Very few studies in the literature have discussed camel related head injuries. We aimed to study the incidence, mechanisms, types, and outcome of camel related head injury in Al-Ain city, United Arab Emirates (UAE) in order to give recommendations on preventive measures.

Methods:

We retrospectively collected data of all patients who were admitted to Al Ain Hospital with camel related head injury from January 1, 2015 through January 1, 2021. Data collected included demography, vital signs, and Glasgow Coma Score (GCS) on admission, mechanism of injury, anatomical location and severity of the injury, associated injuries, and management. The patients were followed up during their hospital stay to record the length of hospital stay (LOS), complications, and outcome. Overall injury severity was determined using the Injury Severity Score (ISS).

Results:

During the study period, 98 patients were admitted to the hospital with camel related injury. 39 (39.8%) of the admitted patients with camel related injury sustained head injury. The median (range) age of patients was 27 (4-51) years. 34 (87.2%) patients were camel caregivers. 33 patients (84.6%) were injured in farms. The most common primary mechanism of injury was fall while riding the camel in 24 (61.5 %) patients. All patients were admitted at the same day of injury and none of them were wearing helmet. 24 (61.5%) patients had isolated head injury while 15 (38.5%) patients had associated other body regions injuries. 34 (87.2 %) patients had mild traumatic brain injury (GCS 13-15), Brain concussion was the most common head injury in 22 (56.4%) patients. Seven patients suffered intracranial hemorrhage.

GCS was not statistically significant in relation to the injury severity calculated by ISS ($p=0.620$, Spearman Correlation). One patient died during the study period after having decompressive craniectomy for subdural hemorrhage (overall mortality 2.6%).

Conclusions:

Camel-related head injury is common between camel care giver at our region. Compulsory helmet use by those workers should be adopted especially when riding camels to reduce head injuries caused by camel trauma.

Keywords: Animal, camel, head, injury

ORCID Number: 0000-0002-0817-8511

ORCID iD: <https://orcid.org/0000-0002-0817-8511>

