

## **FACIAL TRAUMA PREVALENCE FROM TRAFFIC ACCIDENTS THE CITY OF CUENCA – ECUADOR, 2017**

### **ABSTRACT**

Trauma is defined as physical damage caused by external force applied to the body (Salazar et al.). The etiology of facial trauma is multifactorial. Contusions resulting from traffic accidents constitute the eighth leading cause of death worldwide. The objective of our study is to determine the prevalence of facial trauma due to vehicular accidents in the 2017 year, and its relationship with age, gender, and frequency of emergency care at Vicente Corral Moscoso (VCMH) and Jose Carrasco Arteaga (JCAH) hospitals. This will provide real statistical information regarding the degree of trauma, its primary causes, and initial management, thereby providing elements for planning and executing new studies and establishing preventive measures in the city of Cuenca.

This is a retrospective descriptive study conducted by collecting and analyzing authorized data from cases of patients diagnosed with facial trauma due to vehicular accidents who visited the emergency unit of VCMH and JCAH hospitals in Cuenca, Ecuador, in 2017. We analyzed variables including hospital operational unit, gender distribution, age, type of facial trauma, type of vehicle, and alcohol status. The total prevalence of facial trauma due to vehicular accidents in the city of Cuenca in 2017 was 3.34%, with males outnumbering females at 69.76%, and the age group of 20 to 44 years being the most prevalent at 57.56%. Panfacial trauma predominated, representing 28.48%. The most common vehicle type involved was the automobile at 65.69%. Ethyl breath was detected in 38% of the patients. We found evidence of male predominance and the age group between 20-44 years; panfacial trauma predominated. The automobile was the most frequent vehicle type. Ethyl status was confirmed in 4 out of 10 patients.

**KEY WORDS:** Facial trauma, vehicular accident, epidemiology

### **REFERENCES**

- Agudelo, A.; Duque, F.; Restrepo, L. & Martínez, E. Epidemiology of maxillofacial fractures due to traffic accidents in Medellin (Co- lombia). Gac. Sanit., 29:30-5, 2015.
- Cabrera, C., Piedra, X., Villavicencio, E., & Calderón, D. Epidemiological Profile of Patients with Facial Trauma in Azogues-Ecuador. Rev. Evid. Odontol. Clin., 3:2, 2017.
- Campolo, A., Mix, A., Fonseca, C., Ramírez, H., Vargas, A. & Goñi, I. Manejo del trauma maxillofacial en la atención de urgencia por no especialistas. Sociedad Medica de Santiago. Rev. Med. Chi- le, 145(8):1038-46, 2017.
- Choi, H.; Gu, H. & Kang, H. Analysis of traffic accident related facial trauma. J. Craniofac. Surg., 27(7):1682-5, 2016.
- Hernández, R. Manejo del trauma facial: Una guía práctica. Rev. Med. Clin. Las Condes, 21(1):31-9, 2010.
- Mardones, M.; Fernández, T.; Bravo, A.; Pedemonte, T. & Ulloa, M. Traumatología máxilo facial: diagnóstico y tratamiento. Rev. Med. Clin. Las Condes, 22(5):607-16, 2011.
- Pietzka, S.; Kämmerer, W.; Pietzka, S.; Schramm, A.; Lampl, L.; Lefering, R.; Bieler, D. & Kulla, M. Maxillofacial injuries in severely injured patients after road traffic accidents a retrospective evaluation of the TraumaRegister DGU® 1993–2014. Clin. Oral Investig., 24(1):503-13, 2020.
- Román, D. Integración de un Programa de Seguridad Vial al Modelo Ecuador, Quito. Universidad San Francisco De Quito, Ecuador, 2015.
- Salazar, J. D.; Sandoval, F. J. & Sandoval, V. F. Prevalencia de fracturas faciales atendidas En El Servicio De Cirugía Maxilofacial del Hospital Carlos Andrade Marín HCAM entre los años 2013 y 2018. 5(2):16-31, 2019.

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