DRC1: Incidence of Facial Paralysis in Temporal Bone Fracture at a Tertiary Government Hospital in the Philippines

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INTRODUCTION: Temporal bone fractures occur in patients who suffer from trauma to the facial region. According to a research done at the Philippine General Hospital in 2017 of motorcycle related accidents, 11 of the 76 trauma subjects in that study or 15% had a fracture of the temporal bone.

METHOD: This is a retrospective study conducted in a tertiary government hospital within an urban part of the Philippines. Patients seen or referred with signs, symptoms and CT scan findings of a temporal bone fracture for a 22 month period from August 2016 to June 2018.

RESULTS: There were a total of 41 patients with temporal bone fractures, 32 of them were male (78%). Using the traditional classification of temporal bone fracture, 32 were longitudinal (78%) and 9 were transverse (22%). Using the newer classification 38 was otic-sparing (93%) and 3 were otic-disrupting (7%). Based on its laterality 23 occurred on the right side (56%) and 17 occurred on the left side (41%). Of the 41 temporal bone fractures 9 developed facial paralysis (22%). Out of 32 longitudinal temporal bone fractures, 7 or 22% had facial paralysis. Out of 9 transverse temporal bone fractures 2 or 22% had facial paralysis. Out of 38 otic-sparing temporal bone fractures 8 or 21% had facial paralysis. Out of 3 otic-disrupted fractures only 1 (33%) had facial paralysis.

CONCLUSION: The incidence of facial paralysis after a temporal bone fracture is on the average 22% for all fracture types. A conclusion on the significance of otic-disrupted temporal bone fractures and its relationship with the incidence of facial paralysis cannot be drawn because of the small number of subjects.

KEYWORDS: Trauma, Fracture, Temporal Bone Fracture, Longitudinal Temporal Bone Fracture, and Transverse Temporal Bone Fracture, Otic-Sparing, Otic-Disrupting, Facial Nerve, Facial Nerve Paralysis.