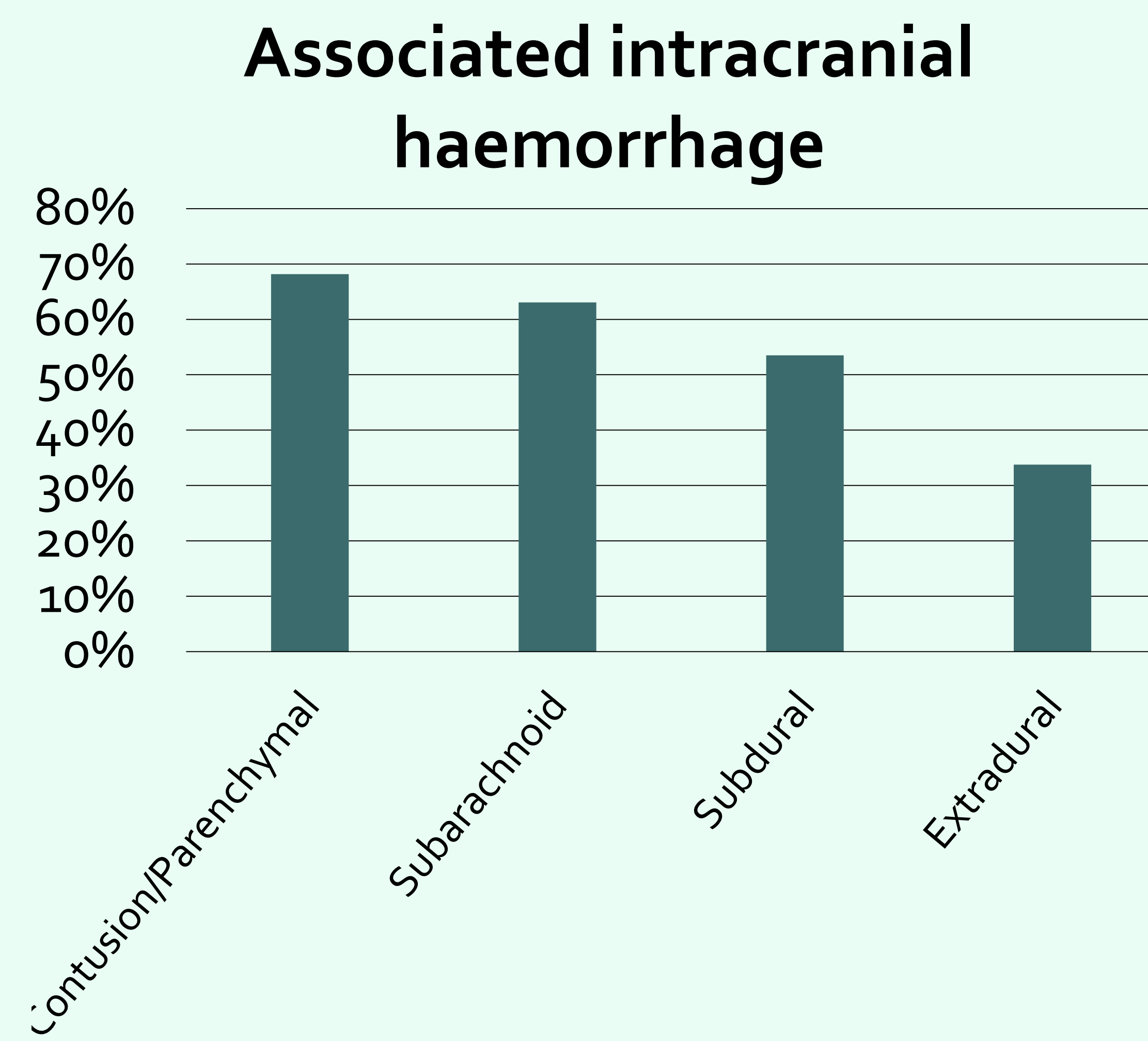
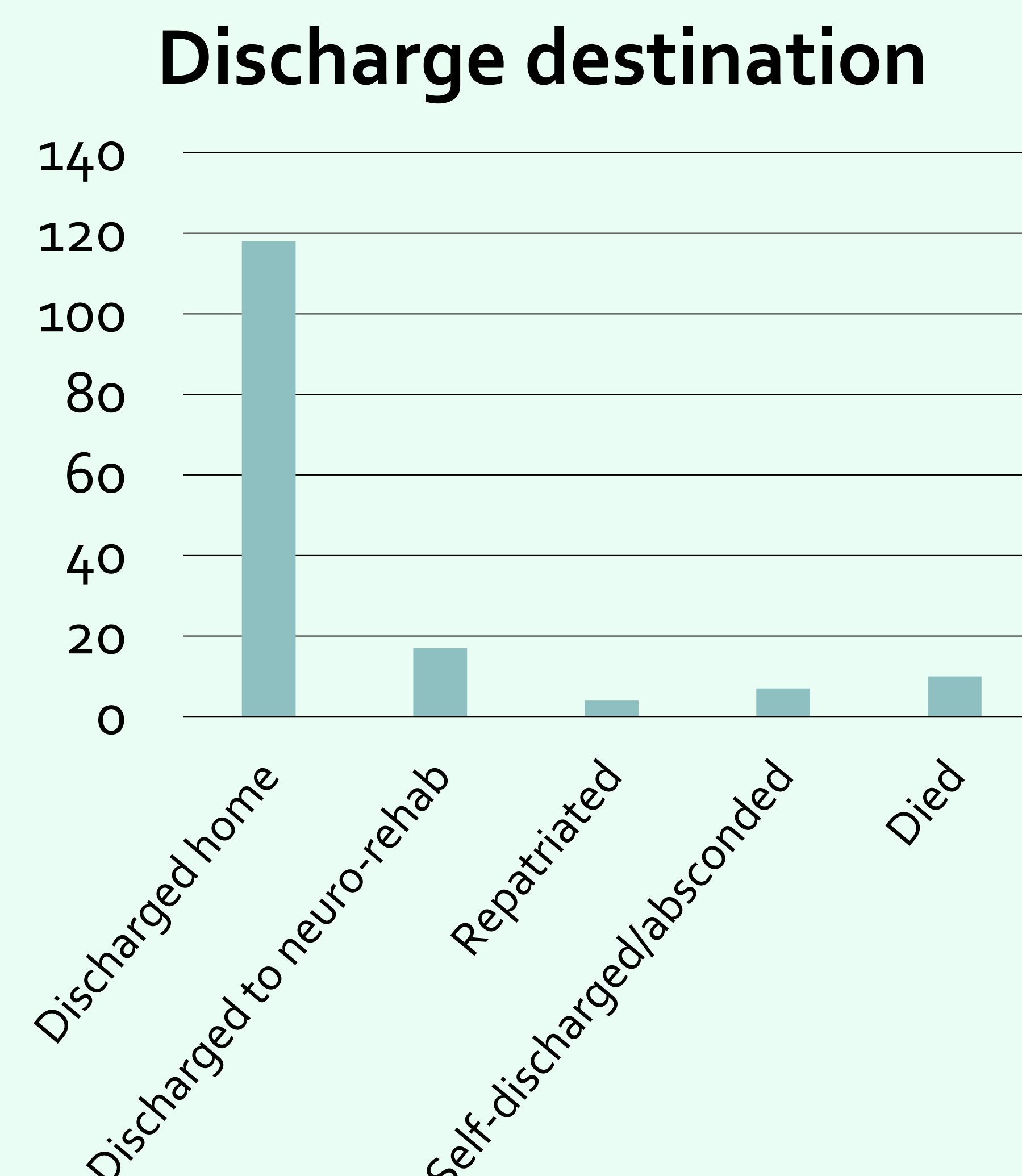
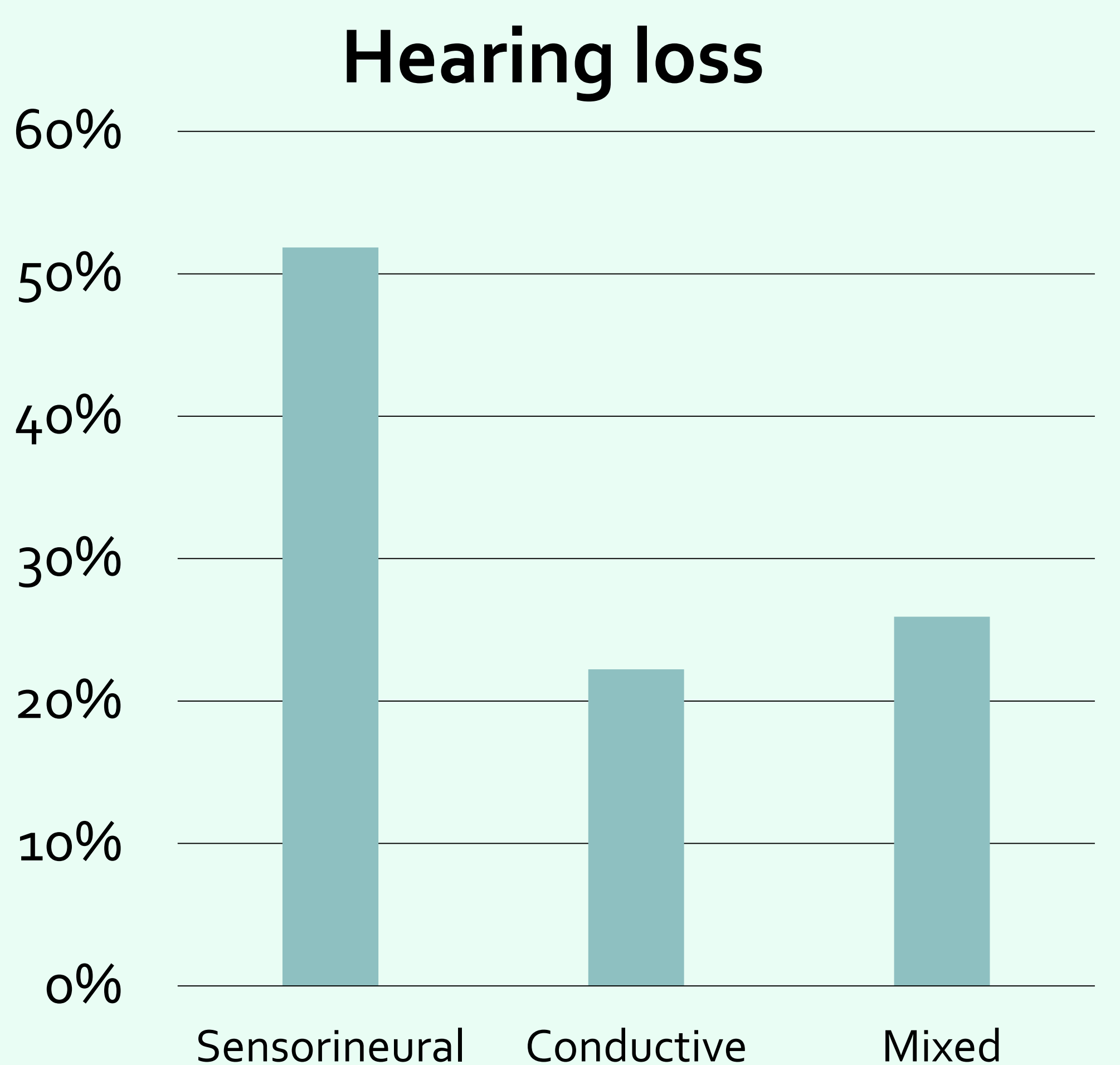
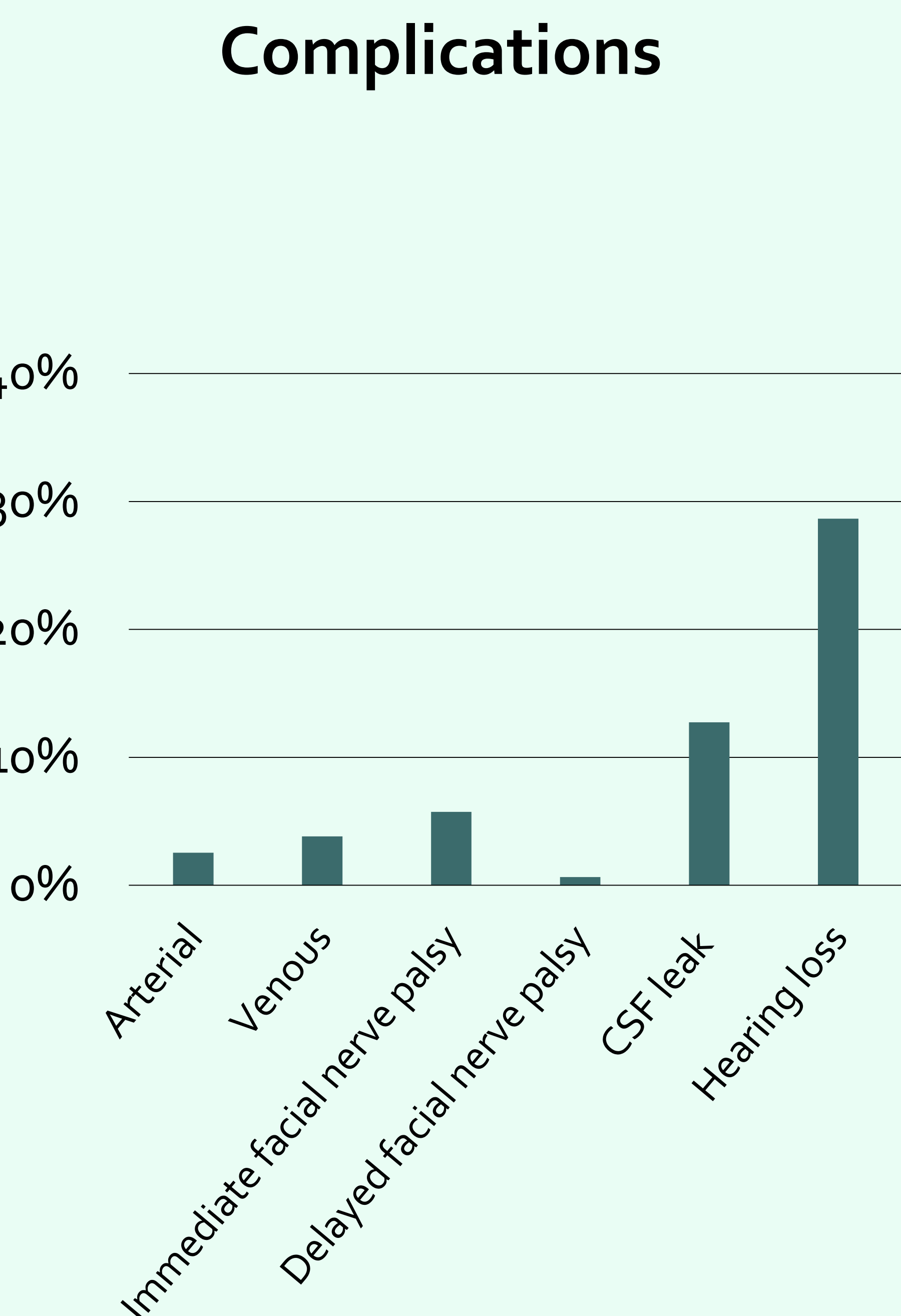
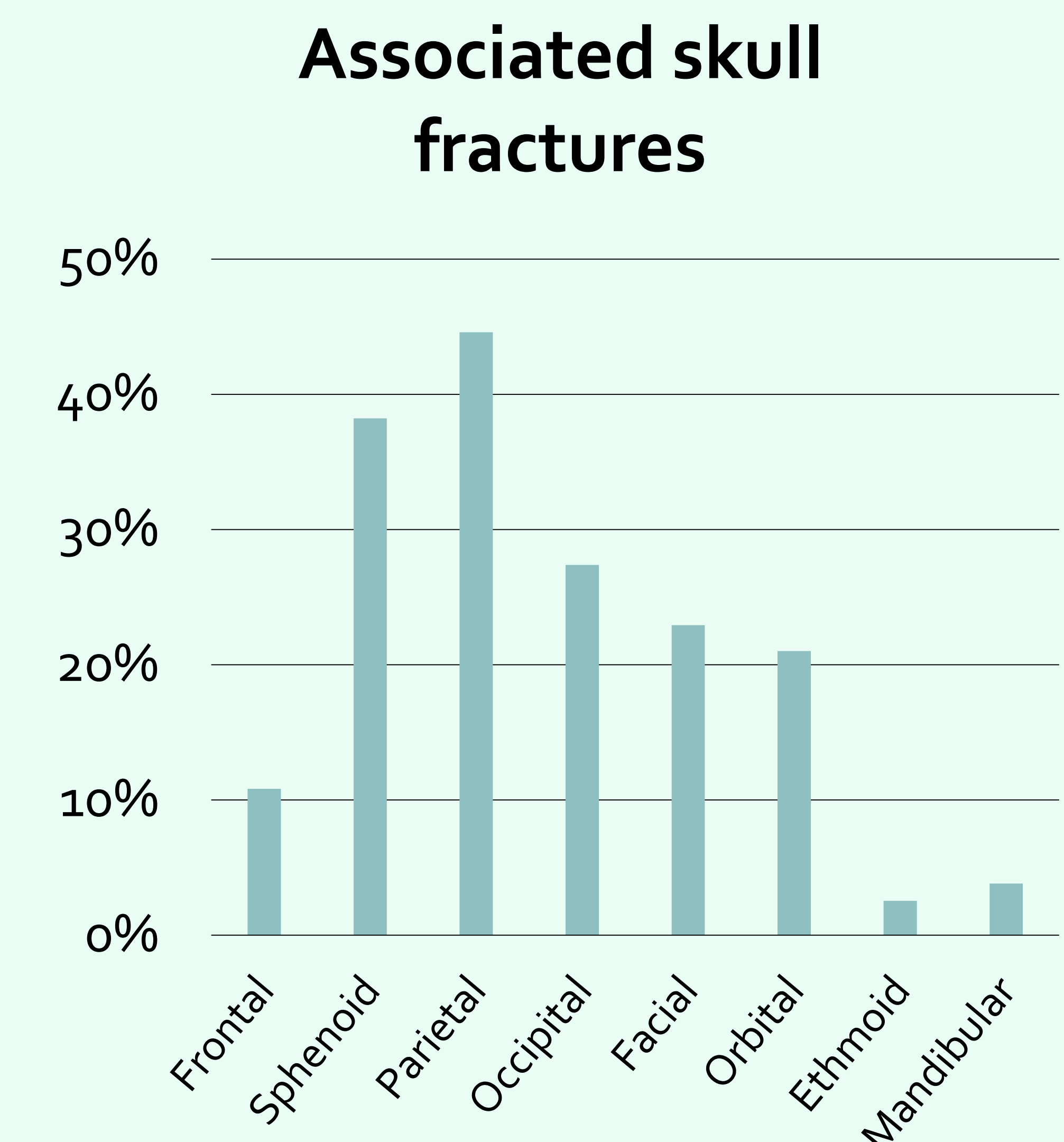
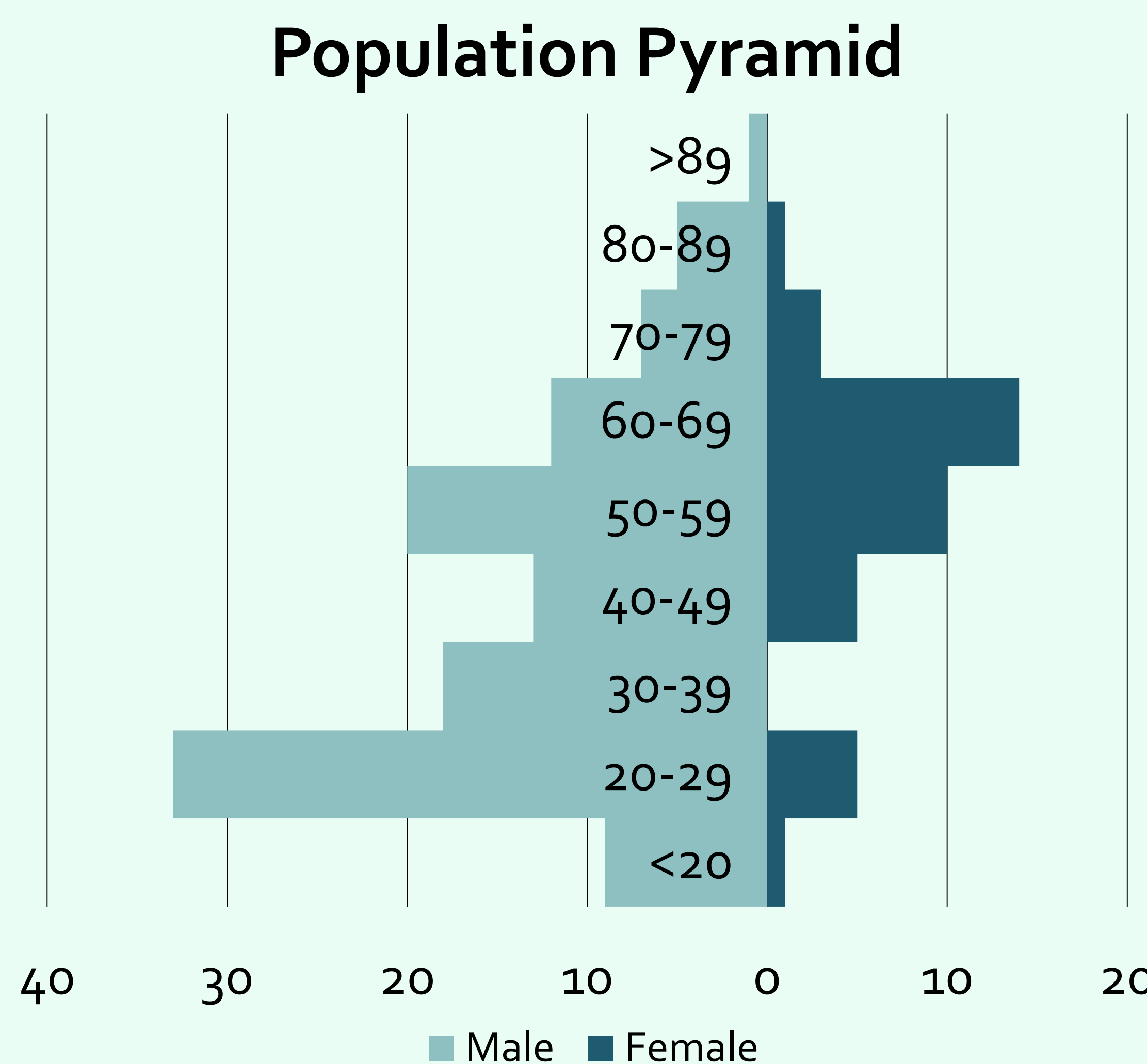
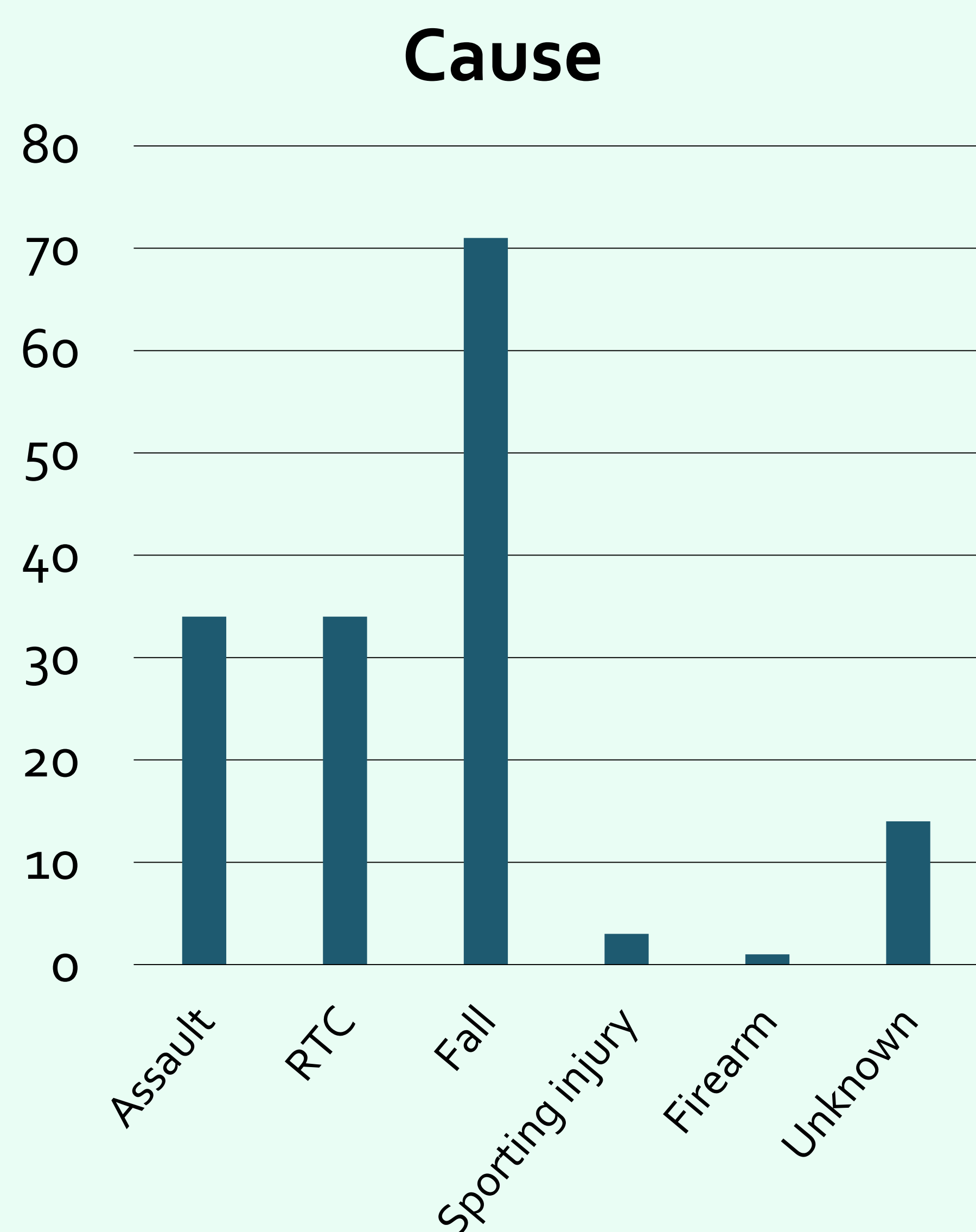


Epidemiology and complications of temporal bone fractures: 12-month experience at a major trauma centre

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To our knowledge the largest published case series of temporal bone fractures in the UK and Ireland comprises 31 patients.¹ Over a 12-month period at our major trauma centre, 157 of 1828 emergency neurosurgical admissions sustained temporal bone fractures. 42% of patients required level 2 or 3 care, and 10 patients did not survive to discharge.

Temporal bone fractures rarely occurred in isolation. 83% had at least one additional skull fracture, the most common fractures being parietal, sphenoid and occipital fractures. Intracranial haemorrhage was common: a majority of patients had subarachnoid haemorrhage, and subdural and extradural haemorrhages were common. However, only 18% of patients required surgical intervention for intracranial haemorrhage.

The most common complications were hearing loss, which was usually sensorineural, and cerebrospinal fluid leak, which usually stopped spontaneously. Immediate facial nerve palsy occurred in 9 patients (6%). Vascular complications included venous sinus thrombosis, internal carotid artery dissection, and caroticocavernous fistula. Complications were more frequent than in other recent large case series.²

Temporal bone fractures are complicated injuries requiring detailed evaluation by the radiologist for signs of complications and associated injuries. This case series highlights the high rate of complications in this British trauma population.

¹ Rafferty, M.A., Mc Conn Walsh, R. & Walsh, M.A. (2006) A comparison of temporal bone fracture classification systems, *Clinical Otolaryngology* 31, 287-291.
² Schubl, S.D., Klein, T.R., Robitsek, R.J., Trepeta, S., Fretwell, K., Seidman, D. & Gottlieb, M. (2016) Temporal bone fracture: Evaluation in the era of modern computed tomography, *Injury* 47, 1893-1897.