

A Case Report of Hyperostosis Frontalis Interna

I.H. Dissanayake, D.N. Amarasooriya, W.N. Adikaram, P.S. Monarawila,
R.W. Angammana*

*Department of Basic Sciences, Faculty of Dental Sciences, University of Peradeniya,
Peradeniya, 20400, Sri Lanka*

**angammanar@dental.pdn.ac.lk*

Hyperostosis frontalis interna (HFI) is an uncommon condition characterized by excess bone growth with multiple nodules mostly on the inner table of the frontal bone but occasionally extending into other cranial bones. Estimated prevalence of HFI is 5-12% of the general population, and the magnitude of manifestation and frequency of HFI are much higher in the female population. HFI is mostly considered as a benign condition. With the increase in the severity of bone overgrowth it can cause symptoms by compressing the brain matter. Reduced blood supply to the localized areas of the brain can cause in localized neurological signs and neuropsychiatric symptoms such as mood disorders, Schizophrenia, atypical non progressive Parkinsonism and impairment of memory and cognition. We report a case of HFI in 85-year-old female identified during a routine dissection in the Faculty of Dental Sciences. A transverse cut of the calvaria was made according to the dissection guidelines. The inner table of the calvarium of the frontal bone was covered with large, irregular nodular bony thickening, but it was not present on any part of other skull bones. The overall extension of bony overgrowth was more on left side compared to the right side. The antero-posterior osseous thickness spanned approximately 1.5 cm in right side and 2 cm in left side into the cranial cavity. Some areas of parietal bone were noted to be markedly thin, while temporal ridges of both side of skull were more prominent. There was no noted internal damage to the brain was found including the arterial examination. All the suture lines were fused, and the suture lines were hardly noticeable. Although there's a significant prevalence of HFI among general population, there are very limited research studies carried out in Sri Lankan population. The CT findings can misinterpret HFI as bone metastases, or hemorrhages. Therefore, the adequate awareness about HFI, gold-standard diagnostic methods, and radiological findings in HFI among medical professionals will reduce such false positive diagnoses.

Keywords: Hyperostosis frontalis interna, postmenopausal women, calvarial growth