Cribra Orbitalia, Sinusitis and Linear Enamel Hypoplasia in Swedish Roman Iron Age Adults and Subadults

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Abstract

ABSTRACT Maxillary and frontal sinusitis, cribra orbitalia and linear enamel hypoplasia were recorded as indicators of nutritional and environmentally related stress in an Early Iron Age (0–260 AD) population from Sweden. The material comprised the skeletal remains of 99 adults and 45 subadults (aged 20 years and under). Maxillary sinusitis and cribra orbitalia were recorded in the majority of subadults and adults. In contrast, linear enamel hypoplasia was uncommon and occurred mainly in the subadults. In seven cases (12.7%) there was a clear co-occurrence of periapical lesions and maxillary sinusitis. A significant co-occurrence of maxillary sinusitis and frontal sinusitis was found in the adults. The least common combination in sex-determined adults was cribra orbitalia and enamel hypoplasia, only 7.7% exhibiting both lesions. The significantly higher incidence of this combination among subadults suggests an association with life-threatening conditions. Overall, the results showed that the Early Iron Age community studied suffered foremost from upper respiratory diseases.

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Keywords:

- sinusitis
- cribra orbitalia
- linear enamel hypoplasia
- periapical lesions
- Early Iron Age
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