

Calvarial hyperostotic syndrome (CHS) in an eight-months-old female Bull Terriër.

History: An eight-month-old, female bull terrier was presented with a painful mass located on the dorsal aspect of the head.

CT findings: Characteristic findings consist of cortical thickening of the calvaria with irregular, bony proliferation over the frontal, temporal, and occipital bones.

Figure1: Reconstruction images in the midsagittal (A) and transverse planes (B) in bone algorithm. There is vast, heterogeneous sclerotic areas with bilateral thickening of the forehead bone, (red arrows). More caudal there is an expansive bone reaction, irregular and with cavities (blue arrows).

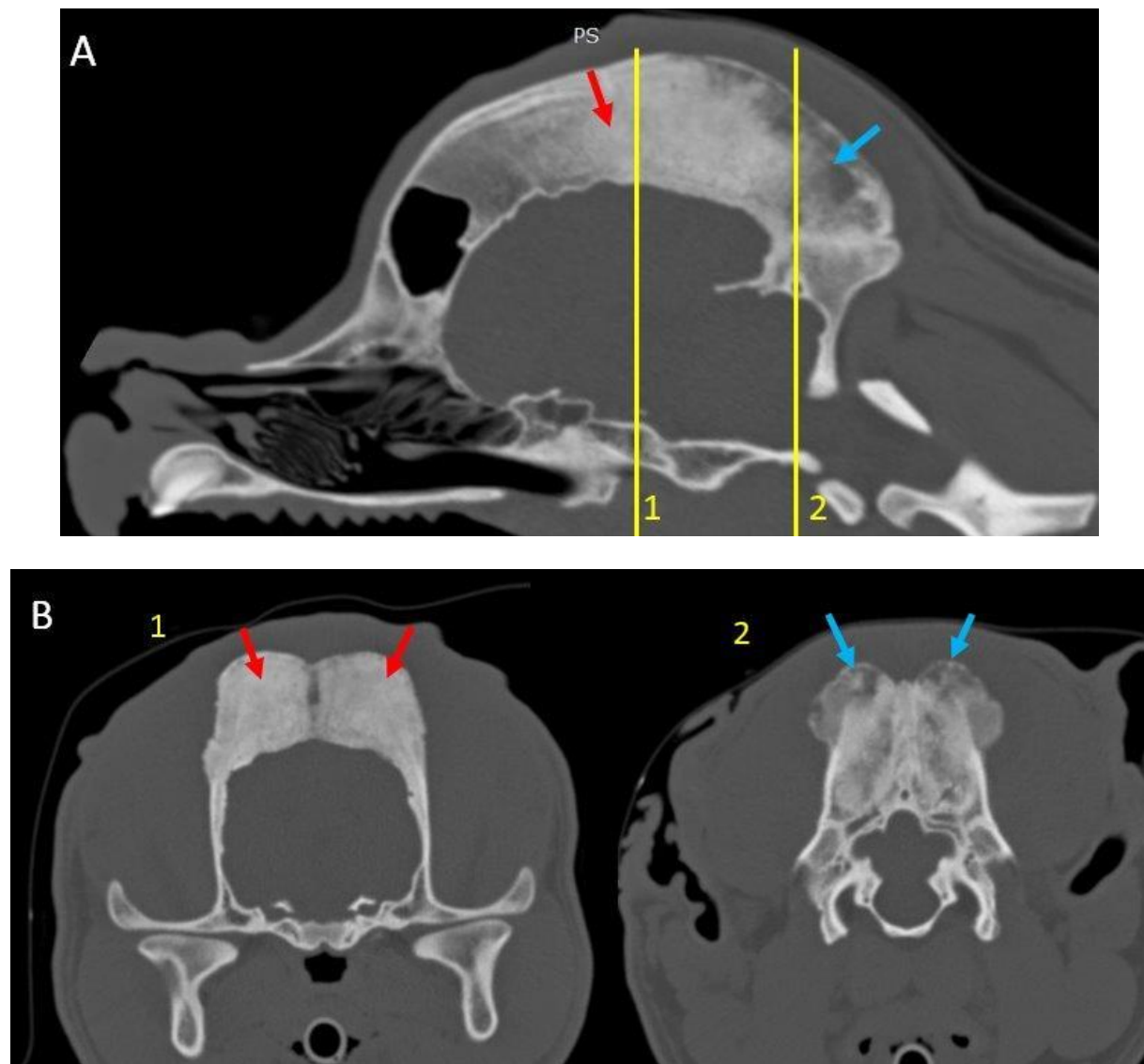


Figure2: Reconstruction images in the midsagittal (A) and dorsal (B) plane, in bone algorithm. There is loss of trabecular structure and irregular periosteal reaction at the level of the skull roof (blue arrows).

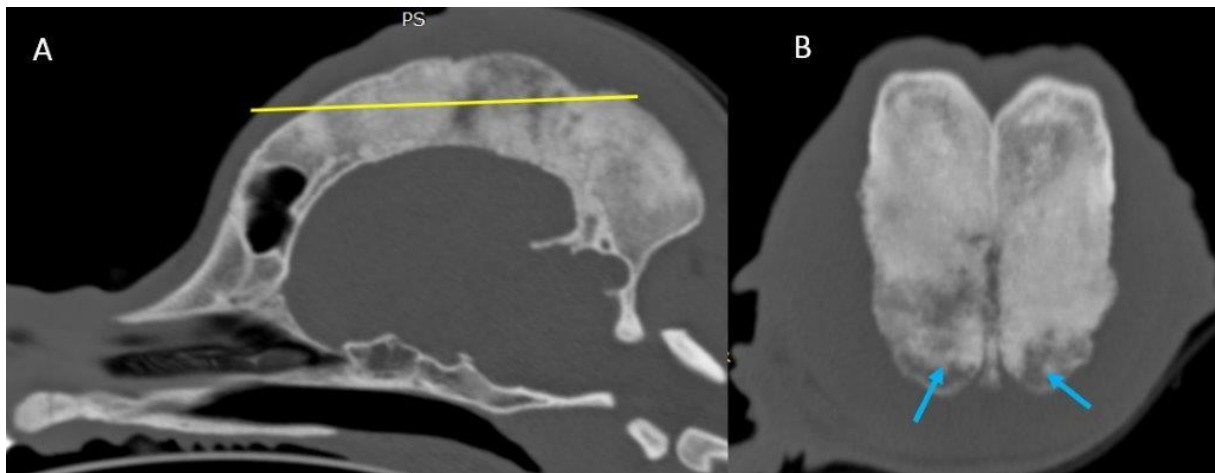


Figure3: 3D CT image of the skull. The irregular bilateral bone reaction, at the caudal level of the skull, is pronounced present (blue arrow).



Diagnosis: Calvarial hyperostotic syndrome (CHS).

The aetiology remains unknown; however, traumatic, neoplastic, and degenerative conditions do not appear to be primary factors in the etiopathogenesis of the syndrome. It may be that this syndrome has a familial component, similar to that described for canine craniomandibular osteopathy (CMO) and human infantile cortical hyperostosis (ICH). This disease is self-limiting.

Idiopathic hyperostosis of the calvaria in five young bullmastiffs.
KF Pastor; JP Boulay; SH Schelling; JL Carpenter
J Am Anim Hosp Assoc (2000) 36 (5): 439–445.