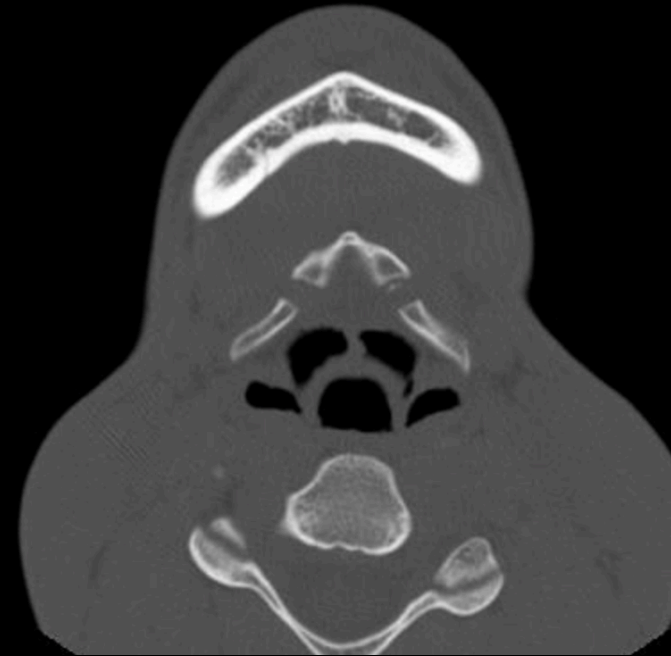
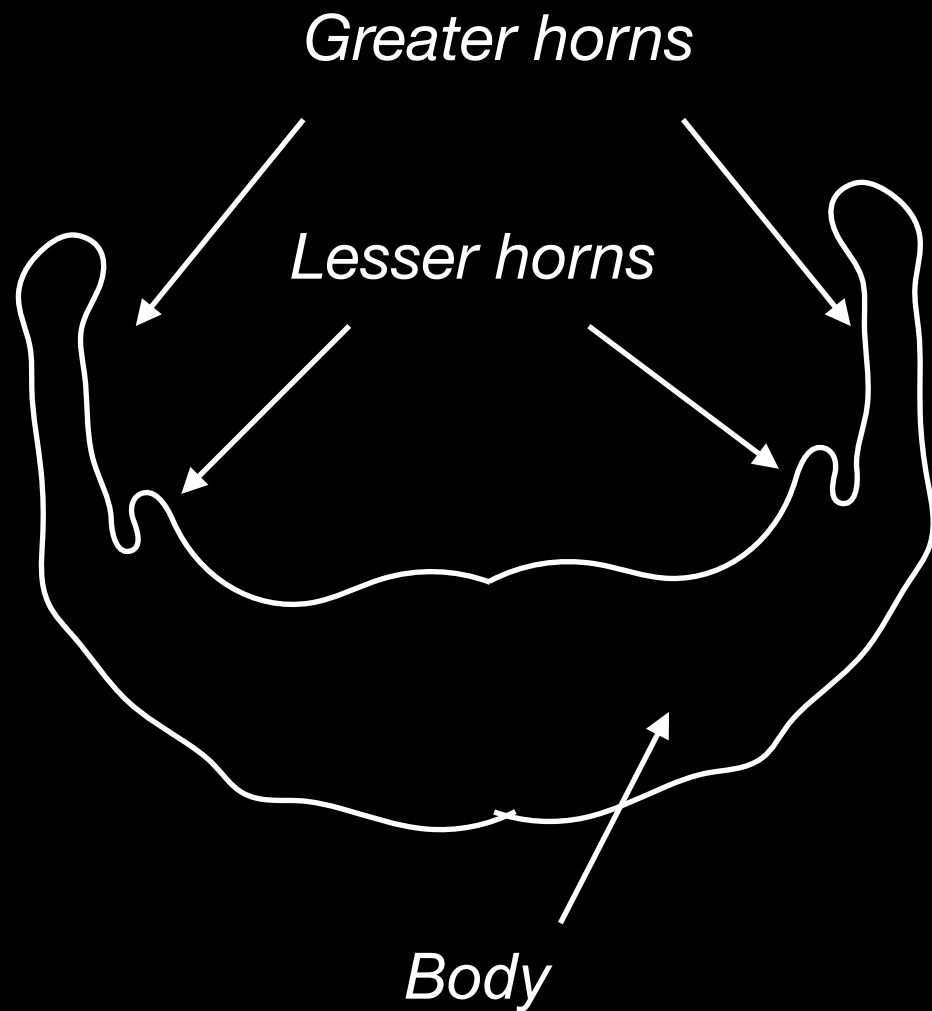
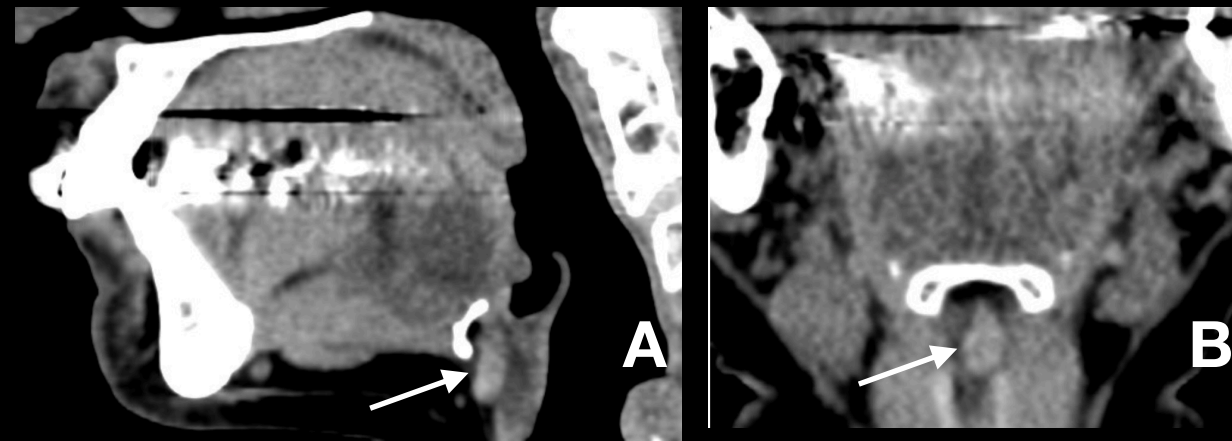


# Hyoid Bone - Anatomy, embriology, developmental malformations and symptomatic cases

The purpose of this painel is to review the hyoid bone structure and function, embriology, anatomy and physiologic variants, as well as the imaging appearances of the main pathologies that may affect the hyoid bone.

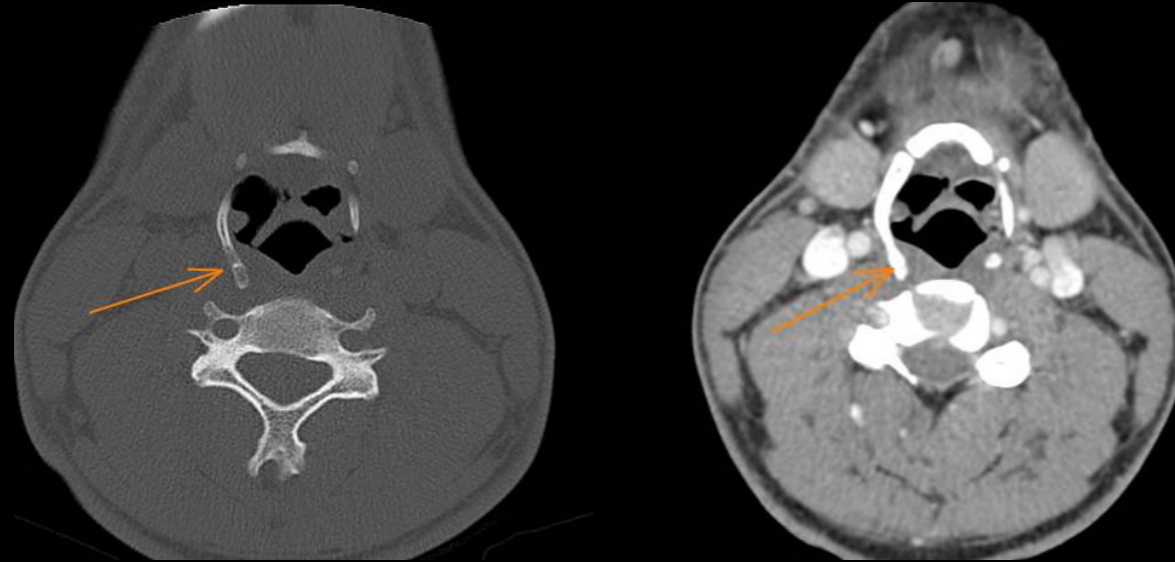


Hyoid bone ossification centers in a 16 years old patient



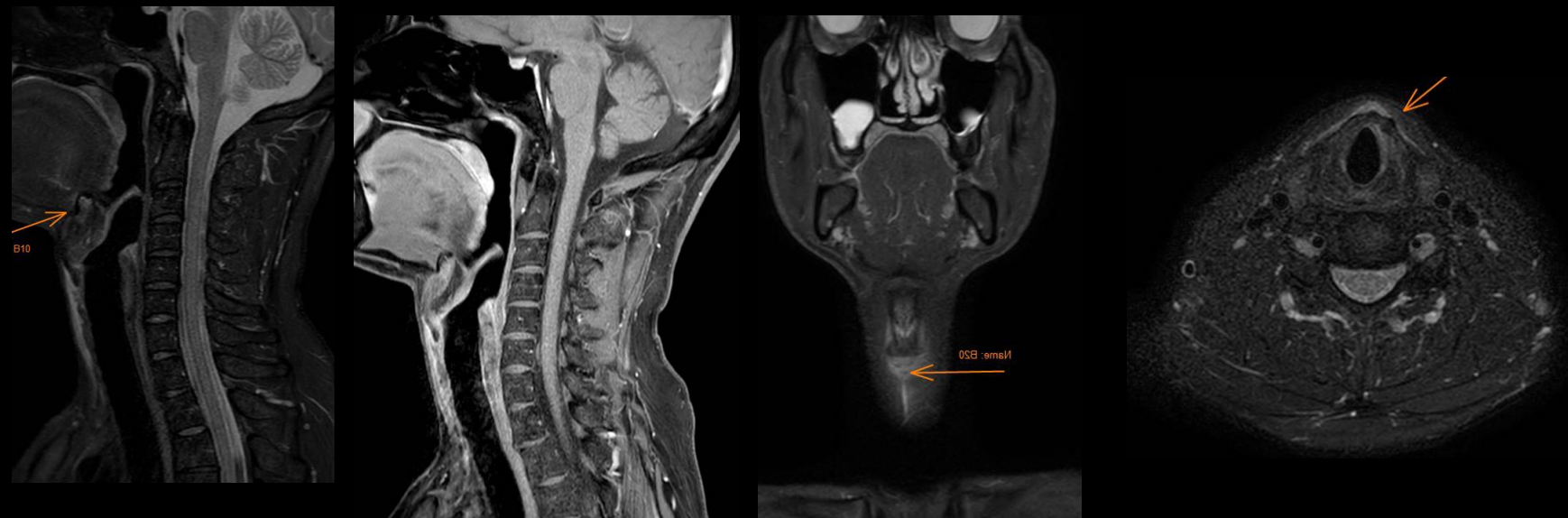
Sagittal (A) and oblique coronal (B) non enhanced CT images demonstrating a small hyperattenuating nodule in anteromedial neck region, interposed between hyoid bone body and thyroid cartilage laminae commissure, most likely representing ectopic thyroid tissue in the course of the thyroglossal duct.

# Hyoid Bone Syndrome (Clicking Hyoid Syndrome)



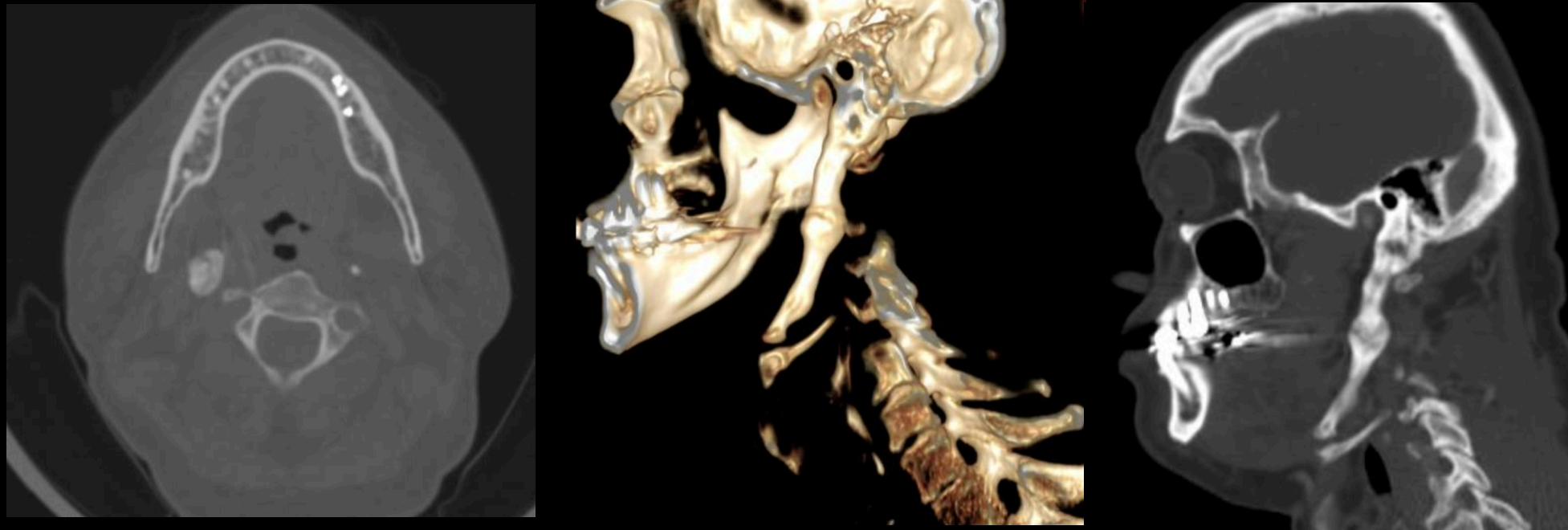
*Enlargement of greater horn of hyoid bone that can impinge on cervical vertebrae. This impingement of cervical vertebrae produces interosseus friction (clicking hyoid syndrome)*

# Tirohyoid Syndrome



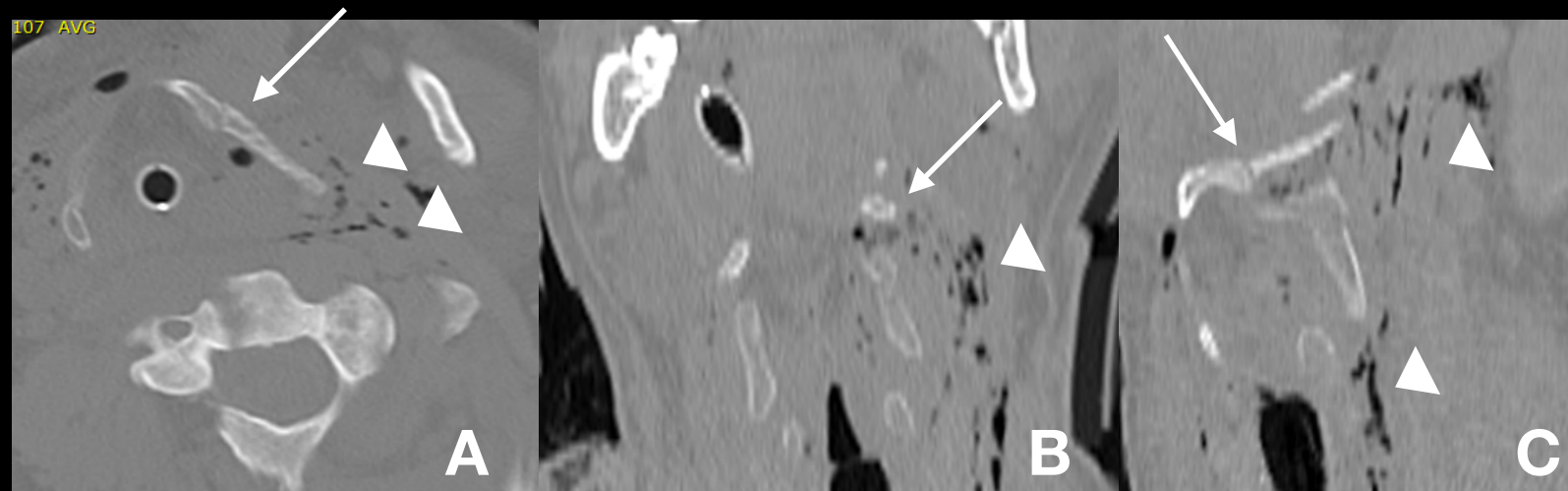
*T2WI hypersignal and Gd enhancement along the lateral thyrohyoid ligament and adjacent tissue. Clinically, it's characterized by pain which is worsened by swallowing and neck movement and localized between the lateral side of thyrohyoid membrane.*

## Eagle Syndrome



*Elongated right styloid process and calcification of the stylohyoid ligament. The left styloid process (not shown) was also elongated to a lesser extent.*

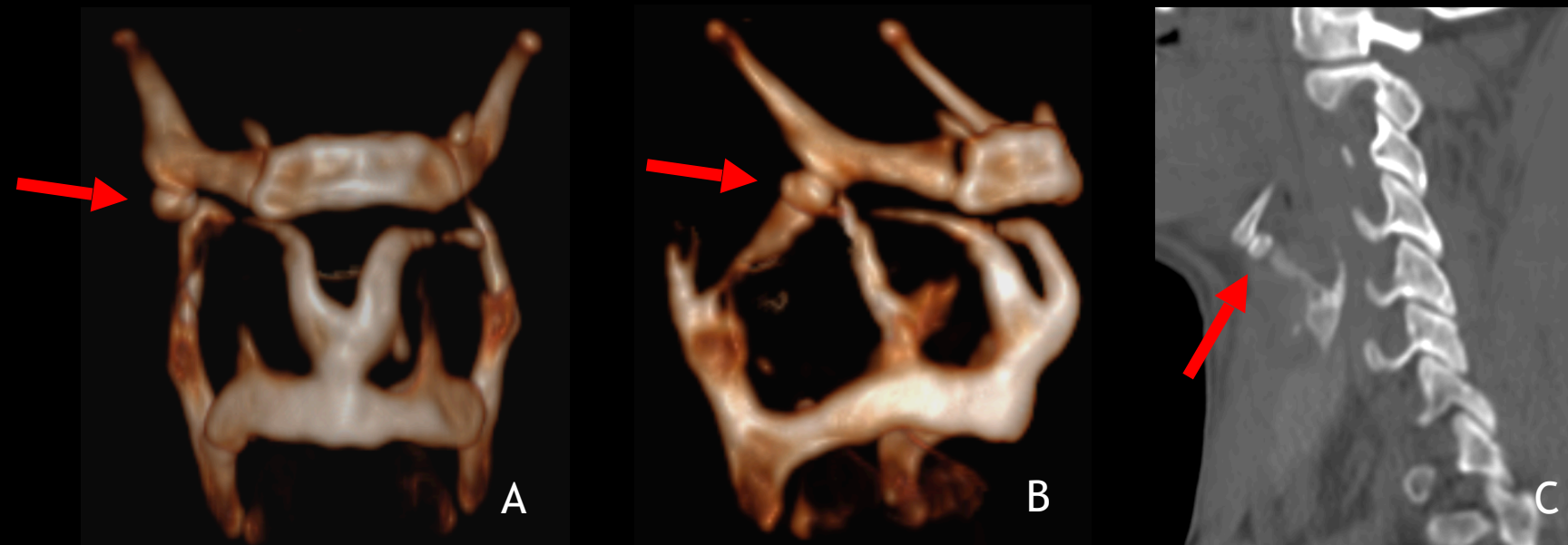
## Hyoid Bone Fracture



*Axial (A), coronal (B), sagittal (C) CT scan discloses complete oblique fracture of the left hyoid bone cornu (arrows) due to automobilistic accident. There are also multiple emphysema foci (arrowheads).*

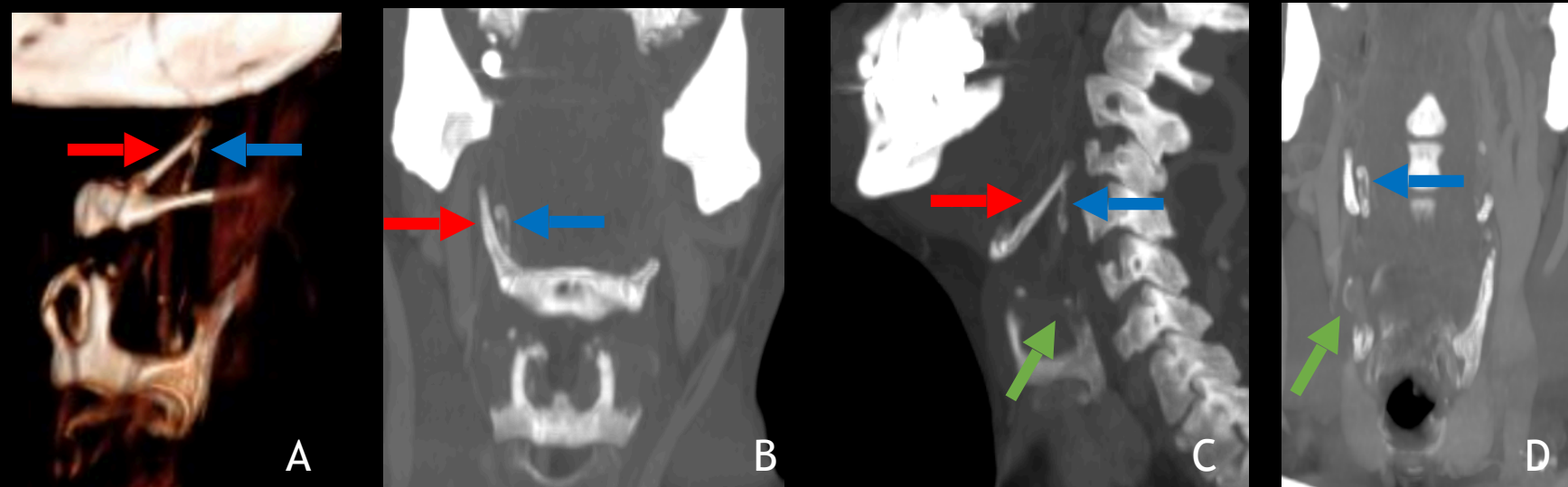


## ***Triticeal cartilage ankylosis in the hyoid***



*3D CT (A and B) and sagittal MPR CT (C) demonstrating thickening and calcification of right triticeal cartilage (red arrows), which is ankylosed to the lower margin of the greater horn of the hyoid bone and to the upper right horn of the thyroid cartilage, determining a reduction in the thyrohyoid space.*

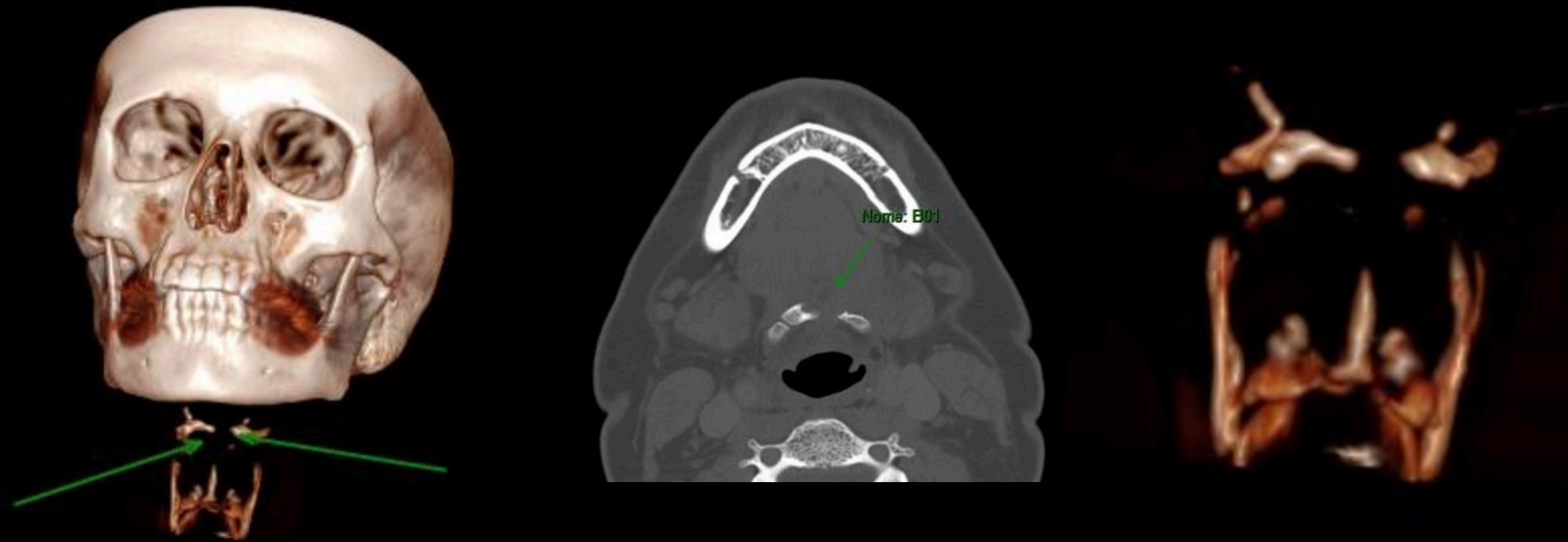
## ***Dislocated hyoid bone fracture following laryngeal trauma***



*3D CT (A) and MIP coronal (B and D) and sagittal © demonstrating hyoid bone deformity characterized by medial fracture sequelae and superior rotation of the greater horn of the hyoid bone (red arrow). A calcified and elongated structure can also be seen medial to the greater horn of the hyoid bone (blue arrow), which may represent a fragment of the calcified thyroid cartilage (green arrow).*

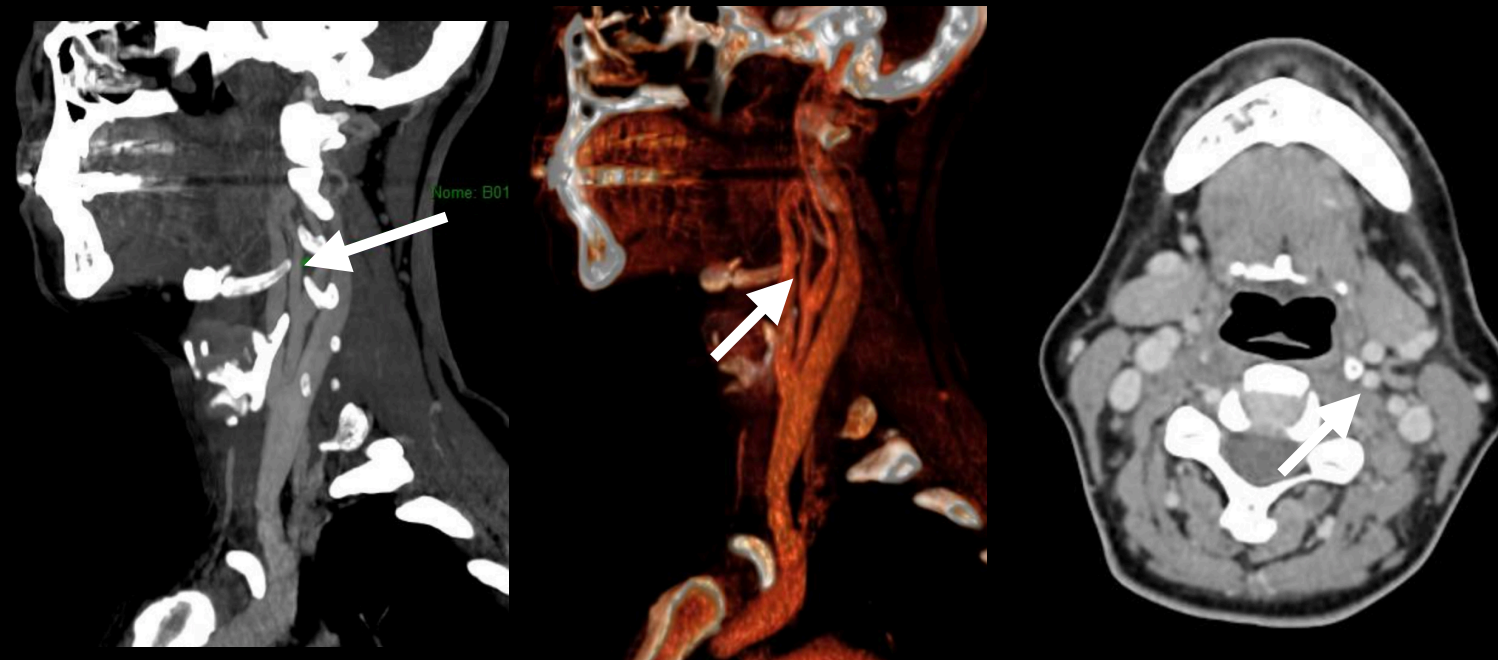


## Sistrunk procedure



Removal of part of the hyoid bone for thyroglossal duct cyst surgery

## Vascular Compression



Elongated greater horn of the hyoid bone impressing over left external carotid artery