Torus Palatinus: A common but relatively less known entity.

Clinical history: A 40 year old male presented with history of noticeable hard lump over the central roof of the mouth since many years. Out of patients concern to rule out malignancy, CT scan was advised.

CT imaging findings: There is evidence of a poly lobulated lesion measuring 3 cm in AP, 1.8 cm in transverse and 0.8 cm in SI dimension noted in the posterior half of the hard palate on either side of midline. It shows lobulated contour and protrusion in the oral cavity. There is no evidence of cortical break or associated soft tissue component noted. The lesion comprises predominantly of densely corticated bone and limited amount of central cancellous bone.

Diagnosis: The diagnosis of a torus palatinus was made

Discussion: A torus palatinus (TP) is a painless bony protuberance located at the union of the processus palatinus maxillaes that form the hard palate. This focal hyperostosis is covered by a thin and poorly vascularised layer of mucosa. It can be recognized with either a flat, (poly)lobulated, spindle-shaped or nodular appearance. Torus palatinus and its mandibular counterpart, the torus mandibularis (TM), are the two most common forms of focal hyperostosis.

The exact etiology is still a matter of debate although a combination of genetic and environmental factors has been attributed. It tends to appear more frequently during middle age of life and is more commonly observed in females.

A small torus palatinus is present in about 20% of the population and is mostly asymptomatic. A large torus palatinus can possibly lead to phonatory disturbances, mastication disturbances, food deposits and dental prosthetic instability. The rate of growth of these bony masses is very slow and gradual.

Diagnosis is mostly incidental during a routine dental check-up since most tori are asymptomatic. When imaging is needed CT is the imaging modality of choice. Key points to diagnosis are the typical localization of the lesion at the midline of the hard palate, the often symmetrical presentation along the midline and sharp delineation of the dense cortical bone with only a limited amount of cancellous bone in the centre.

When the palatal lesion is clinically suspected, the most important differential diagnosis that needs to be made is malignancy of the hard palate. It is important to understand that in case of a torus palatinus the mucosal layer is always intact. A torus palatinus can also be seen as part of the clinical spectrum of the autosomal dominant inherited type of hyperostosis corticalis generalisata congenita also known as Worth syndrome.

As tori are often an incidental finding during routine clinical examination, treatment is usually conservative and surgical removal is only performed in case of prosthetic instability, phonatory or mastication disturbances or as a potential donor site for bone grafts. In few cases the skin overlying the torus palatinus may be subjected to constant ulceration and subsequent infections, in which case it may present as painful swelling requiring surgical intervention.
CONCLUSION:
- A torus palatinus is a slow growing painless bony protuberance that develops from the midline of roof of the mouth.
- As common as in 20% population, wherein they may also represent as small subtle swelling, which are asymptomatic and hardly noticeable.
- Obvious bony outgrowths protruding in the oral cavity attracts attention, and CT scan may be performed for patient’s anxiety and to rule out malignancies of hard palate.

Dr. Deepa S. Nadkarni / Dr. Shaikh M. Mazhar
N.B: This case is authentic and from the archives of Radiance Diagnostics. For any queries/suggestions / feedback write to us at radiance@radiancediagnostics.in. Case of the month can also be accessed anytime online at VIEW BOX at www.radiancediagnostics.in