Benign Masticatory Muscle Hypertrophy

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A 32 year old Indian male presented with progressive painless swelling of both jaws and temporal regions. The patient was otherwise asymptomatic and denied history of bruxism. Clinical examination revealed bilateral non-tender swelling over both mandibles and temporal fossae (Figure 1). Systemic examination and dental examination was normal. Magnetic resonance imaging (MRI) of the head revealed a homogenous increase in the bulk of the masticatory muscles – bilateral temporalis and masseter (Figure 2). The option of Botulinum toxin injection was offered to the patient.

Idiopathic masticatory muscle hypertrophy is a relatively rare disorder which usually manifests in late adolescence or early adulthood. Hypertrophy of the masseters was first described by Legg in 1880. There are a few theoretical explanations for the etiology of masticatory muscle hypertrophy, but the precise etiology is not clear. The most common of these, bruxism is associated with psychosocial stress, anxiety, malocclusion and sleep disorders. Masseter hypertrophy is known to occur in isolation or with temporalis muscle hypertrophy but temporalis hypertrophy without hypertrophy of masseters is very rare. Clinical diagnosis of masseter hypertrophy could be difficult in unilateral cases and differential diagnosis in such patients includes parotiditis, parotid tumor, lipoma, vascular tumors, benign or malignant muscle or mandibular tumors. Computed tomogram, magnetic resonance imaging and ultrasonogram can be used to confirm muscle hypertrophy. Milder cases do not require therapy, or merely reassurance or tranquilizers; however in severe cases or for cosmetic considerations botulinum toxin type A or surgery can be considered.

References


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Received: 14.04.2009; Accepted: 02.05.2009