

# Lingual Malformation Presenting as Macroglossia

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**Abstract:** Congenital macroglossia is a rare clinical entity. Early diagnosis and treatment is necessary to prevent feeding problems and defective speech articulation. We are presenting a rare case of congenital macroglossia due to venous malformation.

**Keywords:** Macroglossia; Speech articulation; venous malformation; Embolisation; Lingual malformation

## 1. Case Report

10 year old male child presented to us with complaints of gradually enlargement and protrusion of tongue since birth. Patient had difficulty in eating solid foods but no history of respiratory problem. He was unable to speak properly. On Clinical examination, tongue was soft, non-tender enlarged and protruding from the mouth almost 8 cm from the incisor. The dorsal surface was rough due to exposure to external environment (Figure 1). MRI reveals large infiltrative enhancing soft tissue mass causing diffuse enlargement of the whole tongue with multiple phleboliths. Dynamic contrast angiography reveals mild hypertrophy of both the lingual arteries with small prominent flow void in bilateral sublingual spaces (Figure 2). Diagnosis was made as Macroglossia due to slow flow vascular malformation.

## 2. Discussion

Congenital macroglossia is a rare clinical entity. It is defined as protrusion of tongue beyond the teeth and alveolar ridge. It is generally due to either muscular enlargement or vascular malformation. If significant, it may cause feeding problem, failure to thrive, defective speech articulation etc [1]. Differentials are hypothyroidism, lymphangioma, hemangioma, beckwith wiedemann syndrome, amyloidosis etc [2]. Lingual malformations due to vascular cause are extremely rare cause of macroglossia [3]. Clinical finding and radiological tests are diagnostic. Due to its rarity no standard treatment protocol is established. Super selective arterial or retrograde venous embolization is the current standard treatment.

## 3. Conflict of interest

None

## References

[1] Rizer Franklin M, Schechter Gary L, Richardson Mark A. Macroglossia: etiologic considerations and management techniques. Int J Pediatr Otorhinolaryngol 1985; 8: 225-36.

[2] Murthy P, Laing MR. Macroglossia. BMJ: British Medical Journal. 1994; 26; 309:1386.

[3] Richter GT, Suen J, North PE, James CA, Waner M, Buckmiller LM. Arteriovenous malformations of the tongue: a spectrum of disease. Laryngoscope 2007; 117: 328-35

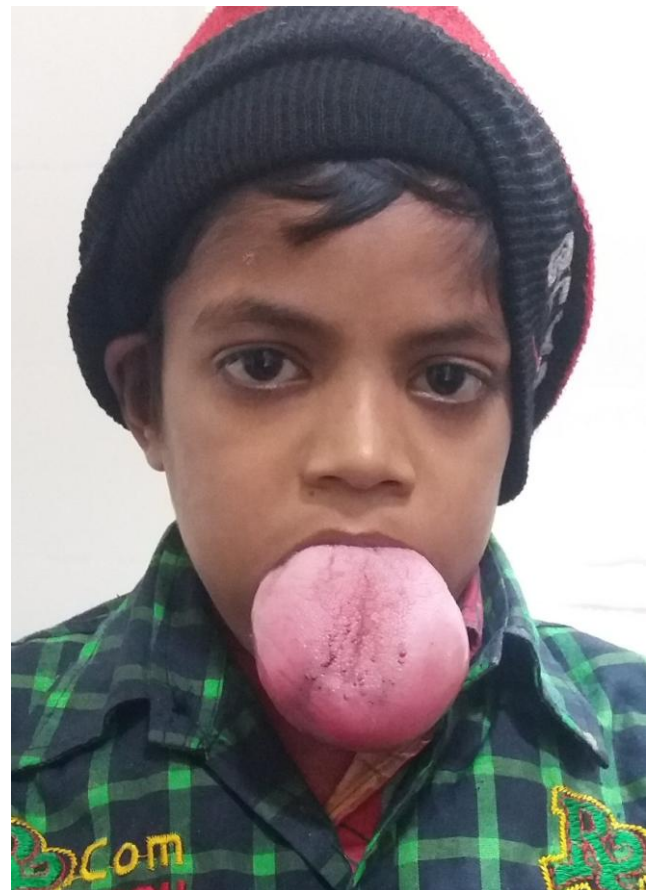
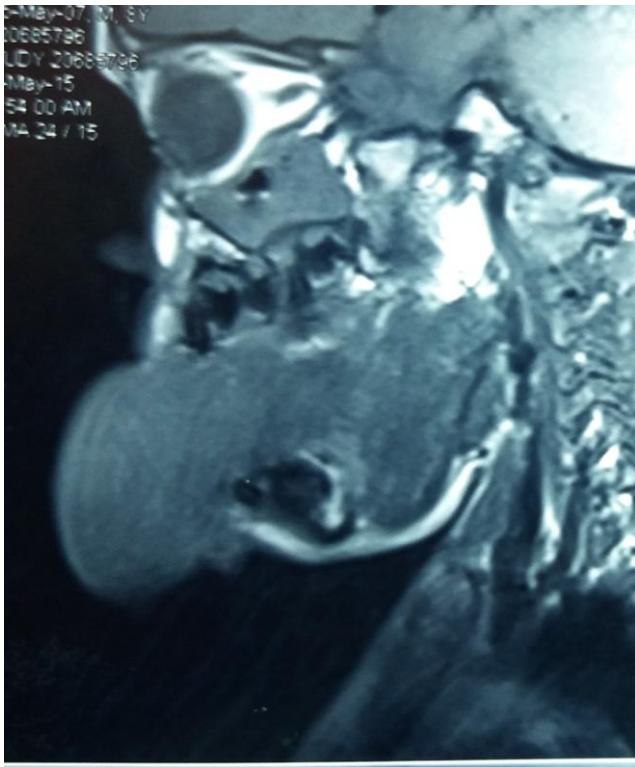


Figure 1: Congenital Macroglossia



**Figure 2:** MRI picture of congenital macroglossia due to venous malformation