

# Editorial

## Macroglossia and Down syndrome

Macroglossia, an enlargement of the tongue to the point that it protrudes beyond the alveolar ridge while in the resting position, is one of the most widespread traits of people with Down syndrome (DS).

The tongue as an organ plays a very important role in a number of critical functions such as deglutition, articulation of sound, and respiration. Other important functions are suction and tactile sensation, as well as recognition of the oral environment and of food –taste buds, responsible for the sense of taste, are located on its surface–.

In our present social context, the placement of the tongue relative to the mouth and lips also has an aesthetic function.

People with DS have high lingual mobility. Secretion of saliva is therefore constantly being stimulated. Drooling –sialorrhea– can have a bearing on social perceptions of the individual in question and may also induce oral thrush (*Candida albicans*) because of the permanent wetness of the corners of the mouth.

Other traits of DS involve the bones of the face and jaw. Gothic palate, a small mouth, a prognathic jaw, maxillary hypoplasia, or an anterior crossbite are found in 69% of cases.

At mealtimes, people with DS tend to

chew very little, and swallow food easily without grinding it much –they could be said to swallow more than they eat–.

While there is very little demand for cosmetic treatment of macroglossia, parents or guardians do occasionally express a wish to improve their child's appearance.

As far as functional treatment is concerned, surgery to reduce tongue length and width is only warranted in exceptional cases. One possible reason for this procedure may be a very long tongue that blocks the upper airways and hampers breathing. Additionally, when orthognathic surgery –also highly unusual– is performed, tongue reduction surgery is sometimes recommended in conjunction with mandibular setback, so that the oral space is in harmony with tongue size making potential recurrences less likely.

It must be borne in mind that all modern orthognathic surgical techniques require orthodontic treatment before, during and after the surgery.

Finally, it should be pointed out that surgery for macroglossia, if required, is a relatively simple technique for oromaxillofacial surgeons, but its potential post-operative complications can be life-threatening if the airways are compromised.

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