

# Bone lengthening technique proves useful in patients with cleft palate

#### March 14 2014

A technique called distraction osteogenesis can create increased length of the upper jaw in patients with cleft lip and palate deformities, reports a study in the March issue of <u>The Journal of Craniofacial Surgery</u>, edited by Mutaz B. Habal, MD.

### **Distraction Technique Used to Lengthen the Palate**

Dr. Emeka Nkenke of Erlangen University Hospital, Germany, and colleagues, report on the use of <u>distraction</u> osteogenesis to lengthen the maxilla (<u>upper jaw</u>) bone in patients with <u>cleft lip and palate</u>. In this technique, hardware is placed to gradually "stretch" bone in the desired direction. The researchers studied the bone-lengthening approach because the maxilla often regresses toward its original position after standard surgical advancement techniques.

Distraction osteogenesis was used in seven adolescent to young adult patients with <u>cleft lip</u> and palate deformities and "maxillary hypoplasia" (very small maxilla). The technique successfully increased the length of the maxilla by an average of 6.4 millimeters. During follow-up, the new bone regressed significantly—by about 7.5 percent. However, that was much less than the 50 percent or greater regression that can occur after standard surgical approaches.

Complications included an infection in one patient and loosening of the distraction hardware in another. Dr. Nkenke and coauthors conclude



that, when needed to create maxillary bone length of no more than 12 millimeters, the benefits of the distraction osteogenesis technique outweigh the risks.

Another paper in the March issue includes a report of a very unusual complication from a sports-related injury.

## Three Months after Soccer Injury, an Unusual Complication

Dr. Nebil Yeşiloğlu and colleagues of Dr. Lütfi Kırdar Kartal Training and Research Hospital, Istanbul, report the unusual case of a man with an infected, draining wound on his chin. Three months earlier, he had been kicked in the jaw during a soccer game. He had a small cut at the time, which healed over.

X-rays and CT scans showed a vague abnormality of the jaw bone, but couldn't identify the cause of the wound. On operating, the surgeons were surprised to discover a two-centimeter plastic cleat from a soccer shoe, embedded close to the <u>bone</u>.

After the cleat was removed and the area was cleaned, the wound healed without further problems. The authors highlight the need to carefully assess the patient's history for clues as to possible unusual foreign bodies that may not appear on x-rays.

#### Provided by Wolters Kluwer Health

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