were distracted around an arc approximately 20 mm on the right side and 15 mm on the left. For 4 months of consolidation, the density of new bone was close to that of normal bone. The part of lost maxilla was reconstructed and bony support was set up in the low position of the maxilla (Fig. 2).

In patients with large maxillary defects, the remaining bone in the defective side is very scarce, without enough bony support, and reconstruction is very difficult. Our idea is to restore part of the lost maxilla by distraction osteogenesis of the remaining zygoma and set up bony support in the low position of the maxilla to form the basis for later functional reconstruction.

Today, most distractors reported are straight\textsuperscript{1,2}; only a few of them are curvilinear, but all can be used for distraction osteogenesis of the mandible.\textsuperscript{3-5} The zygoma and maxilla are curved structures and in the midface. Thus, we developed a new internal curvilinear distractor to fit the

![Fig. 1. Internal curvilinear distraction osteogenesis of the zygoma was performed on the patient with the bony transport disks made on the remaining zygomas and the distractors installed bilaterally.](image1)

![Fig. 2. After 4 months of consolidation, the regenerated bones showed almost normal calcification and density. The bony support was set up in the low position of the maxilla.](image2)

zygoma. Every part of the distractor is made from titanium alloy. It is small and light, and can be installed subcutaneously. The curvature of the vector of the device is derived from measurements of 20 dry human skulls. The central bar is made from nickel titanium alloy, which is flexible and durable. By revolving the flexible central bar, the movable part can be advanced along the curvilinear vector, and then distraction of the zygoma transport disk around an arc can be accomplished. Except for the distraction activator being exposed in the temporal region, most of the distractor can be buried.

After 4 months of consolidation, new bone had formed well in the distracted gap, part of the zygoma had been “transported” to the low position of the maxilla for implantation, and the prosthesis might get sufficient support and retention from it for mastication reconstruction to be achieved. Also, with bony support, bone transplantation can be considered. That is, the procedure has formed a good basis for later functional reconstruction.

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Xue-Gang Niu, Ph.D.
Xiao-Xian Han, M.D.
Department of Stomatology
252nd Hospital of Chinese PLA
Bao-ding
He-bei Province
People’s Republic of China
Correspondence to Dr. Niu
Department of Stomatology
252nd Hospital of Chinese PLA
Bao-ding 071000
He-bei Province
People’s Republic of China
niuxuegang@sina.com

REFERENCES


Herpes Zoster after Reconstruction for Head and Neck Cancer

Sir:

Patients with cancers of the head and neck are at significant risk for herpes zoster.\textsuperscript{1} The morbidity of zoster in this region can be severe, including
encephalitis, blindness, deafness, and refractory neuralgia. Prompt initiation of antiviral therapy significantly reduces the risk of morbidity; however, establishing the diagnosis of zoster can be difficult after reconstruction. Tissue rearrangement and mobilization of distant tissues can distort or efface classic dermatomes, hindering identification of zoster. Surgeons performing reconstruction for head and neck cancer must be aware of postoperative zoster and take measures to guard against associated morbidities.

A 68 year-old man presented with painful rash on the right side of his face (Fig. 1). His history included reconstruction of a right cheek defect after wide excision of squamous cell carcinoma. The patient was admitted for wound care and empiric antimicrobial coverage including acyclovir (10 mg/kg intravenously every 8 hours). Polymerase chain reaction and immu-

Fig. 1. (Above) A 68-year-old man with a history of recurrent squamous cell carcinoma of the right cheek after head and neck reconstruction with free anterolateral thigh flap (black arrowheads), pedicled trapezius myocutaneous flap (white arrowheads), and local tissue rearrangement. (Below) Six months after completing reconstruction, the patient presented with unilateral facial pain, a vesicular rash in the distribution of the trigeminal nerve ($V_1$ and $V_2$ branches), and soft-tissue ulceration. Flap tissue was relatively spared from involvement, even though it is contiguous with the area of cutaneous lesions.
Disclosure

Neither of the authors has any conflicts of interest to disclose.

REFERENCE


