

**CONCLUSION:** There is a correlation between disc and condylar displacement in the intercuspal position, not only in the sagittal but also in the frontal plane. To avoid a mistake in the establishment of maxillo-mandibular relationship both the condylar and the disc position should be taken into consideration.

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## 23.

### Treatment Considerations for Mandibulectomy Patients

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Prosthetic rehabilitation of patients after resection of the mandible due to operation of malignant tumors usually poses a great problem. Loss of tissues and damage caused by radiotherapy cause various functional deficiencies and dysfunction in the stomatognathic system.

The study concerned treatment of a group of mandibulectomy patients with problems related mainly to restoration of jaw relationship, lack of occlusion and dysfunctions. In the examined cases immediate or delayed reconstructive surgery had been completed before prosthetics to treat mandibular discontinuity defects. Unfortunately, many of the patients exhibit lack of occlusion, mandibular deviations and torque due to incorrect muscle activity. Prosthetic management was part of a multidisciplinary approach to the problem. Treatment included myotherapy, gradual occlusal rearrangement with the use of therapeutic and corrective splints, special appliances and prostheses with leading inclined planes and guiding surfaces. The degree of success was related to the location and extent of the mandibular resection, the shape of the bone transplants and presence or absence of natural teeth. The aims of treatment realised were the restoration of acceptable occlusion and improved functional efficiency of the masticatory system.

## 24.

### Comparison of the Nasality of the Unoperated Soft Cleft Palate Patient, with and without Obturator

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Prosthetic rehabilitation of the patient with a cleft soft palate has three main objectives. Foremost is the need to improve the function of speech and comfortable swallowing, that are impaired by the potency of the soft palate, which allows the escape of air or fluid into the nasopharynx and nasal cavity.

Unrepaired clefts of the soft palate produce a deficient velar-pharyngeal seal and require the construction of an obturator toward the speech bulb.

Measurement of the nasality of a patient wearing a speech bulb for 18 years is described in this paper. This was done by means of Nasal View System, Tiger Electronics Inc. (Seattle, WA), which developed this system based on the work of Awan (1996, 1997).

The Nasal View system is a PC/Windows based system, which enables the recording of high-resolution speech signals using Windows compatible sound cards (sampling at up to 44100 Hz at 8 or 16 bits of resolution).

The hardware components included in the Nasal View system include headgear and a portable custom dual-channel pre-amplification unit. The key component of the headgear is a rigid plate, constructed of 5 mm thick styrene, which is used to separate an oral from a nasal microphone. The special sentence was used for our assessment. In this sentence 5 sounds out of 28 are nasal sounds (17.86%).

The results are as follows:

With the obturator in place the values of nasality were: Ave 19.32% SD 14.31%, Max 66.53% Min 1.28% Median 15.04% Mode 12.70%.

The measurements of nasality without the obturator were: Ave 41.31% SD 24.39% Max 97.03% Min 7.61% Median 30.02% Mode 23.26%.

Nasality measurement is displayed in the histogram of the nasality distribution, in the real-time analysis, power spectrum, LPC spectrum power and LPC spectrum, and in spectrograms.