

SHORT COMMUNICATION

SC2 - SINUS REACTIONS TO ZYGOMA IMPLANTS.

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Key Words

Zygoma implant, zygomatic implants, zygoma bone, atrophic maxilla, sinusitis, edentulism

Introduction

In the edentulous patients with severe maxilla bone atrophy, zygoma implants can offer an alternative to bone grafting in dental rehabilitation. To reach the zygoma bone, zygoma implants cross the sinus cavity. They constitute a foreign body within the sinus, and therefore may promote maxillary sinusitis. The purpose of this retrospective study is to assess the incidence of maxilla sinusitis after zygoma implants placement.

Material and Methods

Over an average period of 33 months, 40 patients were treated with one or two unilateral zygoma implants. The sinus on the other side was free of zygoma implant. A total of 46 implants were placed. We compared the incidence of maxilla sinusitis in the sinus crossed by the implant and the sinus free of implant. The diagnosis of maxilla sinusitis was established on a medical assessment including clinical signs and symptoms typical of a maxillary sinusitis. In those patients with a positive anamnesis, the diagnosis of maxillary sinusitis was confirmed by CT-scan.

Moreover, the success rate of zygomatic implants was evaluated and based on the classical success criteria for implants: no mobility, no pain, no infection of bone or soft tissues, no bone loss around the implant, no fracture of the implant

Results

Within the 40 patients, 5 developed maxilla sinusitis over the studied period. The incidence of maxilla sinusitis was 12,5% ($p < 0.05$) in the implanted sinuses. No sinusitis was found in the sinuses free of implants. In one patient, the zygoma implant had to be removed due to resistant sinusitis despite of medical and surgical treatment.

The success rate of the zygomatic implants in our study is 98%.

Discussion

The success rate of zygoma implants in this study is similar to those found in literature (98%). The incidence of maxilla sinusitis in this study was 12,5%. This is similar to other observations in the literature and to maxilla sinusitis mentioned with the use of bone grafts. Nevertheless, no study has been realized to define the occurrence of maxilla sinusitis after zygoma implants placement. No particular risk factor for sinusitis could be clearly identified and further studies should be conducted to understand its occurrence in some patients. Moreover, considering the rate of sinusitis after a medical assessment may actually underestimate its incidence: chronic sinusitis may indeed be asymptomatic. The pre-operative CT-scan should be standardized to look for signs of sinusitis and could then be compared to a standardized post operative control CT-scan a few months after surgery.

Conclusion

Zygoma implants and bone grafts demonstrate reliable results and a good success rate for dental rehabilitation on patients with severe maxilla bone atrophy. The incidence of sinusi-

tis seems to be similar with both techniques. Treatment of sinusitis in patients with zygoma implants is quite easy and don't affect the success rate. The advantages of the zygoma implants are his less heavy surgical procedure, an easier follow up, reduced risk of morbidity and a faster dental rehabilitation.

Références

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