Application of Vibrant Soundbridge in hearing restoration after modified radical mastoidectomies in children

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Introduction:
Fundamental aim of the radical surgery is to remove the focus of infection from the middle ear area and to ensure patient's safety.
An important principle of various modifications of those operations is to leave in place even the smallest remains of conductive apparatus of the middle ear in such a way that they do not become the source or cause of disease’s recurrence while enabling effective reconstruction in future.
But sometimes reconstructive surgery is impossible or ineffective.
In such cases we can help the patients with middle ear implants e.g. Vibrant Soundbridge (VSB).

Material and Method:
The analysis was performed in a group of 31 children; observation period was minimum 1 year. The results were assessed in about 1 month, 3 months, 6 months and 1 year in accordance with the follow-up program adopted in our Institute.
Surgical procedure included implantation of VSB with direct stimulation of Round Window (RW) membrane with Floating Mass Transducer (FMT).

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Results:
Observed results confirm that, even in cases of very advanced, chronic otitis media with cholesteatoma, temporal bone destruction or granulation, or with all changes together, in cases where tympanoplasty is impossible or has no good results we have possibility of hearing restoration with VSB implantation.

Conclusions:
1. Patients after radical mastoidectomy without possibility of tympanoplastic surgery can be candidates to VSB implantation.
2. The obtaining of very good hearing results in our group of patients with direct RW membrane stimulation with FMT transducer of VSB, ought to be considered as the valid proposition of management of choice in such cases.

Reference:

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