A new solution for conductive hearing loss
Device to adhere

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The Adhear System

The Adhear System is a bone conduction system for non-surgical solution.

**Indication:** single sided or bilateral conductive hearing loss

**Methods:** four children had been provided; two male, two female between nine months and four years of age; anatomic pathology: three patients have an atresia of the meatus acusticus externus and a dysplasia of the auricle single sided; one patient has furthermore an atresia of the middle ear, bilateral anophthalmus, craniosynostosis and a subfunction of the hypophysis.

**Results: Quality of live**

Parents were pleasing the device. Especially the wearing comfort was mentioned. When we put the system on for the first time, it was obviously that the children had good conduction. The younger once showed astonished faces and tried to turn to the provided side, trying to figure out, where the new information was coming from. The child that was already speaking, answered to the open question what the first impression was: It is much louder than my headband.

The two younger children had troubles during the first two weeks with the adhesive adapter. It was necessary to degrease skin behind the auricle with alcoholic fluids. After this procedure the fixation functioned well. Parents mentioned that there were whistling noises due to acoustical backcoupling, when children were wearing jackets with thick and high collars. After two months none of the children refused the device. There were no problems with the skin.

**Conclusion**

The Adhear System is a good option to provide children with a conductive hearing loss, either until surgical treatment is placed, or even as an overall durable solution.

**Tip:**

To ensure a stable fixation and to avoid feedback whistling the device should not be placed too near to the tip of the mastoid.

**Prospective outlook:** We will escort the children until their reconstruction of the pinna. Then a surgery for an implanted conductive hearing device is planned.