

radical surgery in a large proportion of the patients, to avoid the risk of postoperative morbidity.

### **The intralabyrinthine schwannoma**

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In this case report a patient is presented who complains of unilateral sensorineural hearing loss and tinnitus. MR-imaging demonstrated evidence of an intralabyrinthine schwannoma. The diagnosis was confirmed after translabyrinthine resection of the tumour. A review of the literature revealed 16 reported cases of intralabyrinthine schwannomas. In these previously reported cases the main symptom appeared to be sensorineural hearing loss often accompanied with vertigo and tinnitus without radiographic evidence of an intrameatal or cerebellopontine angle lesion. Primary intralabyrinthine schwannomas originate from the vestibular or cochlear division of the eighth cranial nerve without extension into the internal auditory canal. Only in four out of 16 reported cases was the schwannoma diagnosed preoperatively by radiography. A suspicion of an intralabyrinthine schwannoma is justified in all patients with unilateral progressive audiological and vestibular dysfunction without radiographic evidence of an intrameatal or cerebellopontine angle lesion. Increasing availability and quality of MR imaging will enhance our knowledge of the aetiology and growth of intralabyrinthine schwannoma.

### **Cochlear implantation in children: first results**

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In the Nijmegen Paediatric Cochlear Implant programme, funded by the Dutch Health Authority, the Department of Otorhinolaryngology in Nijmegen and the Institute for the Deaf in St Michielsgestel work closely together. Using a standard protocol 99 children were screened for possible implantation. So far, 28 children have been implanted with the Nucleus multichannel system. In the present study the results of 23 children after 12 months follow-up are presented. We have divided the children, according to onset of deafness, into a congenitally deaf group (A), and children who became deaf before and after the age of 3 years old (respectively group B and C). The speech perception abilities were evaluated by means of the Gestel-Nijmegen (GN) test battery. Regarding the speech identification test, a mean score of 94% for group B and C was found, while group A scored 31%. The mean open-set recognition score for group B and C was 48%, while group A scored 8%. In accordance with other groups, the present results suggest that children with a later onset of deafness tend to perform better, after a 12 months follow-up interval, on speech identification and recognition tests than

children who are congenitally deaf. Nevertheless, improvement over time was already seen for some subjects in this group.

### **Glottal closure in normal subjects and effects of frequency and intensity level**

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The degree of glottal closure during phonation has an influence on voice quality and is related to the quality of the vocal apparatus. To quantify glottal closure a frame of reference was created by investigating 47 healthy men and 92 healthy women with videolaryngostroboscopy during the accomplishment of a set of phonatory tasks. By observing recorded images the degree of glottal closure was rated with a percentage. Results indicate that men have better glottal closure than women. Normal glottal closure in men is complete closure, whereas in women closure of at least 90% should be achieved. If these percentages cannot be obtained during loud phonation, the presence of a weak larynx should be suspected. To evaluate and quantify the function of the vocal apparatus, in clinical practice, the larynx should not only be observed at one intensity level, but at a variety of intensity and frequency levels. These investigations should preferably be performed with videolaryngostroboscopy, using a rigid endoscope.

### **Percutaneous radiologically guided gastrostomy: trespass or real entry to the stomach?**

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Enteral feeding in patients with head and neck tumours often requires a gastrostomy. Although percutaneous endoscopic gastrostomy is increasingly used, extreme oropharyngeal stenosis often precludes endoscopic entrance into the stomach. As an alternative to surgical gastrostomy, safe excess to the stomach with fluoroscopic and ultrasonic guidance (PUG) is possible. The procedure requires sufficient insufflation of the stomach. The stomach is entered by direct puncture after local anaesthesia. The whole procedure is guided by fluoroscopy. The stomach is secured to the abdominal wall. After the procedure aqueous contrast is given to check the proper position. No sedation is used. The possible complications are not different from the endoscopic procedure. We used this PUG method in 19 patients, 11 men and eight women, mean age 64 years (range 50–89): Mean follow-up was 119 days. In two patients the catheter was malplaced. One required laparotomy for peritonitis. In the other the catheter was removed and the next day the procedure was repeated uneventfully. Two minor wound infections occurred. We conclude that non-surgical gastrostomy can be performed without endoscopy. The radio-