In both programmes the initial phase is focused on:

- obtaining a good fitting of the speech processors;
- an auditory training of detection, discrimination and, if possible, identification skills.
- integration of the new auditory information with lip reading.

Part of the rehabilitation programme has to be the development of a listening attitude and the transfer of the skills to everyday situations. Without these two components rehabilitation has to be considered a failure. The results on the Antwerp/Nijmegen Auditory Test battery show significant improvements. After about 6 months the scores in the auditory mode alone reach levels that compare with the visual mode in the preoperative stage. In communication situations both modes are more or less complementary. This means that there is a large improvement in the communication potentials.

In an inquiry into the impact of cochlear implants on everyday life patients report an enormous increase in the quality of their social contacts.

Cochlear implants, developments and perspectives

P. van den Broek (Nijmegen)

Cochlear implants have gone through an important development over the past years. In the Netherlands cochlear implants have only been given to patients as part of special projects financed through a fund of developmental medicine (Utrecht, Nijmegen and St Michielsgestel). It is expected that for adults it will be possible to apply cochlear implants from regular health service resources. A children's programme started in 1993 and 23 children have been implanted by the Nijmegen and St Michielsgestel team. In the future the following developments seem of importance:

- the good results obtained in both adults and children warrant a regular financing mode. For the Netherlands a number of 10 implants for adults and 10 for children seems adequate for the next few years
- a new generation of cochlear implants has become available with new coding strategies, which seems to be of benefit for the eventual result
- the indication for cochlear implants will probably change towards more younger children and possibly candidates with minimal residual hearing.

In those cases both ends of a silicone drain can be introduced into the upper and lower nasolacrimal canal and be caught under the inferior turbinate where they are knotted. During the last year we treated 10 children by placing a silicone drain while we studied the inferior meatus endoscopically. In five patients the probe was not able to perforate the nasal mucosa. The mucosa needs to be incised. After evacuation of mucus the probe appears in the nasal lumen. A number of failures of simple probing of the nasolacrimal duct are probably due to the fact that the surgeon erroneously believed he perforated the mucosa, while only a false route was made. Therefore we conclude that in probing the nasolacrimal duct the inferior meatus should be checked endoscopically, especially when previous probing failed to solve the problem.

Surgical closure of septal perforations

J. A. M. de Groot (Utrecht)

Sixty patients operated upon between 1984 and 1993 were reviewed. Mean age: 34 years, men: 34 women: 26. In 41 patients the cause of the perforation was due to previous septal surgery or cauteterization. Five different surgical techniques were used. Small perforations (<2 cm²) were present in 38 patients and large perforations (>2 cm²) in 22 patients.

Surgical techniques:

1 Direct closure after mobilization of the mucoperichondrium (n = 14).
2 Contralateral rotation flaps (n = 6).
3 Homolateral rotation flaps (n = 14).
4 Buccogingival transposition flaps (n = 25).
5 Transposition flap of the inferior turbinate (n = 1).

Techniques 1 and 2 were used with the smaller perforations. Techniques 3, 4 and 5 with the larger ones. In 39 patients perpendicular plate, autogeneic septal cartilage, allogeneic costal cartilage or lyodura was transplanted between the mucoperichondrial layers. No transplant was used in 21 patients. the mean follow-up time was 9.5 months. Complete closure was obtained in 55%. Partial closure in 23%. Sixty percent of the small perforations and 45% of the large perforations were successfully closed. Results were significantly better with the use of a transplant material between the mucoperichondrial layers.

Eosinophils in nasal polyps and nasal mucosa: an immunohistochemical study

A. E. Stoop, J. Biewenga & S. van der Baan (Rotterdam, Amsterdam, Blaricum)

Immunohistochemical stains were performed on nasal polyps and biopsy specimens of the macroscopically unaffected mucosa of the middle and inferior turbinates of patients with