

ENTstatistics Otology Module

Why an otology database?

Standard hospital information systems do not meet the specific requirements of a specialised ENT department. Although they provide for efficient access to patient records, they do not offer options such as the comparison of audiograms, the documentation of the results of complex otological examinations and treatments, the statistical analysis of large data sets or the comparison of various treatment strategies within a clinical trial. But this is exactly what the otology module of the ENTstatistics program is designed to do.

Easy integration of images

While results of audiological examinations are automatically imported with the help of interfaces, other data such as preoperative CT, MRI and x-ray images, intraoperative photos and sketches prepared by the surgeon can be readily transferred to the database by means of a drag and drop function. Direct access to all information relevant to a procedure enables users to review cases in their entirety and make evaluations on that basis.





Prospective data collation - the benefits

The provision of personalised medical care is a declared aim of contemporary healthcare systems. The otology database contributes to the achievement of this aim because it facilitates the illustration and explanation of the prospective success of a planned procedure, such as ossiculoplasty, during patient consultations. While data provided in major journals can provide guidance, there is no doubt that the individual experience of a surgeon can be of considerable relevance. This can be assessed in relation to the issue in question in ENTstatistics with the aid of just a few mouse clicks.

Statistical evaluation made easy

The otology module provides surgeons with a wealth of options for analysing data. The treatment information stored in the database can be analysed from various perspectives and key statistical parameters, such as the average improvement of the ABG, can be rapidly calculated or viewed as graphs. This also means that outlier values can be more rapidly identified, an aspect that is relevant to clinical studies and for the increasingly important requirements of clinical reporting.



Comparative audiogram display with Glasgow Benefit Plot



Statistical evaluation



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"For many years Ear and Skull Base surgical procedures in our ENT clinic have been documented pre- and postoperatively in a computer based Register. Until now this has been difficult and time consuming. The data collected however is indispensable for clinical research and the evaluation of surgical outcome. Several published scientific papers from our clinic are based on data from this Register. The introduction of the ENT Database has facilitated this work substantially. The statistical analysis and evaluation is possible without support from a statistician, which saves time and costs. As all skull base procedures are performed in collaboration with the Neurosurgical clinic the ENT Database is necessary for both clinics. The oral and written preoperative information given to the patients is based on the easily accessible data extracted from the ENT Database. Another advantage of the ENT Database is that it can be designed to fit the demands of different clinics. We strongly recommend the ENT Database to all clinicians who need a comprehensive and user friendly follow up program."

