**Resume**

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**„Possibilities of hearing examination within differential diagnostic for preschool age children“**

Recently, there have been an increasing number of children with the impaired communication ability. The time passes so quickly nowadays and children have to face and cope with the latest technical achievements mainly in the field of communication which is really demanding and which also limits their natural oral communication. We meet more and more children with various speech difficulties such as delayed speech or language development, dysphasia or autism. The common feature these diagnosis is the impaired communication ability.

Special pedagogues who work in special educational centers often meet clients with the impaired communication ability unable to respond to oral speech during their examinations.

In the initial phase of their examination it is necessary to exclude the existence of any kind of hearing impairment. Standard practice – which means to send parents with their child to the ENT specialist – is lengthy. Moreover, children are scared of visiting the doctor in general and this fear makes any kind of contact with the specialist impossible or at least complicated.

The aim of my work focused on differential diagnostics realized in special educational centers is to propose the most suitable methods of hearing examination for the children with the impaired communication ability. The result of hearing examination preschool age children should confirm or exclude hearing impairment using a subjective method.

Hearing problems or any level of hearing impairment identified too late might essentially influence speech development and language skills of a child.

**First hearing examination** provides us with basic information about a client during his/her first visit to our special educational centre. This method must be used with respect to the age of a child and his/her ability to communicate and cooperate. At the beginning we use various acoustic toys to get basic hearing response (reaction) especially with very small children who are not able to speak.

Then we realize the first hearing examination trying to get any reaction to the speech various intensity – speak aloud or whispered speech. We can also find the child´s hearing preference – which means that he/she can hear better high or low pitched sounds in words. Some difficulties during the first hearing examination using the speech of different intensity might be caused by the level of communication abilities of children.

To get more accurate hearing examination results and to diagnose hearing losses the most precisely we can use a **mobile audiometric device** that is equipped with an innovative, clinically certified and interactive audiometric test „ **MAGIC**“ working on the psycho-acoustic base for preschool age children. The device produces fast and clinically valid audiograms for all children, starting with three year old. A child chooses an animal image touching a symbol on the touch screen (monitor) and thus an acoustic signal (stimulus) is activated. The symbol serves as a visual amplifier and child´s cooperation during his/her hearing examination is reinforced in this way.

If a child hears a sound, he/she will tend to continue touching a smiling animal – a symbol on the touch screen. The time of testing is really short less two minutes for one ear on average.

After a brief instruction a child is able to go through the test independently and feedback is monitored by the device. As soon as the last animal symbol is chosen, the device immediately specifies limits and generates the relevant audiogram of a client.

An undisputable advantage of the device is that hearing examination does not depend on child´s communication level.

In my presentation I tried to introduce briefly the comparison of both examinations carried out by the methods mentioned above demonstrated on the example of the case study of four-year-old boy who had subsequently diagnosed developmental dysphasia. An exclusion or confirmation of a possible hearing loss is extremely necessary for further decisions about an early start of our special care – speech reeducation because reeducation for speech impairment is completely different from reeducation for hearing impairment.