

BIAP Recommendation 30/1 Annex 3: Central Auditory Processing Disorders Management

General foreword

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Recommendation

In this management, four main categories are of equal importance, interwoven and interdependent.

1/ Complete multidisciplinary diagnostic investigation

In the context of CAPD diagnostic, aside from the examination of the auditory processes, the cognitive and neuropsychological status have to be evaluated. The overall management should be individualized based on each child's specific profile.

2/ Environmental modifications

In addition to the parents, all professionals working with the child should be well-informed about CAPD and its symptoms.

Environmental modifications can help the child conserve energy while gathering relevant information in classroom, therapeutic and private settings :

- Reduction or elimination of distractive noise sources (cfr recommendation 09/4)
- Use of preferential seating
- Provide a note taker or recording of lectures. This allows the child to focus all his attention on the speaker, to avoid diversion and information loss which might occur during notetaking.
- After a trial period, consider using an FM system or other assistive listening devices.

The most important factor is to obtain the understanding and cooperation of the child's entourage. They should be aware of the impact of background sounds (e.g. radio, TV, ambient noises in the environment) and multiple speaker settings as disruptive factors.

The entourage should verify the child's understanding: preteach new information and vocabulary, repeat and/or rephrase information when appropriate.

3/ Remediation activities

The purpose of these activities is to compensate the symptoms of the disorder through specific auditory training tasks. This stimulates the auditory system by facilitating structural and functional changes (cfr recommendations CT 28/1 and 28/2).

Generally, the use of non-sense auditory material prompts a « bottom-up » processing. Inversely, meaningful material prompts the « top-down » one. Their simultaneous usage is recommended.

Increase the difficulty level of each remediation activity starting with the least difficult ones and with no noise or other distractions. Raise the level of difficulty step by step.

The following remediation activities are described in a non-chronological and non-hierarchical order and should be individually adapted to the needs of a CAPD-child.

- Auditory closure activities

This activity requires the child to fill in missing parts in order to understand: missing word, syllable and phoneme exercises; vocabulary building

- Phoneme training

This activity can develop accurate phonetic representations and improve dictation skills: presentation of minimal pairs, syllables, words...

- Prosody training

This activity can help the child recognize and use the prosodic aspects of spoken words. Changes in syllabic stress patterns can alter the meaning of words. Possible activities: key word extraction; reading out loud with exaggerated prosodic feature,

- Interhemispheric exercises

These activities stimulate the corpus callosum and can improve interhemispheric transfer of information. They may include verbal and non-verbal tasks and provide opportunities to efficiently stimulate the corpus callosum.

A possible non-verbal task is the simple act of throwing a ball from one hand to the other.

During verbal tasks, verbal-to-motor (stimulate collosum – linking/interaction of both brain hemispheres) tasks may be used. For example the child is instructed to find a particular hidden object (in a bag or behind a screen) just by using the left hand.

A motor-to-verbal transfer occurs when this process is reversed: the child feels an object with the left hand and is instructed to describe it verbally.

Singing and playing an instrument (at the same time!!!) require rapid transfer of information across the corpus callosum.

Non-verbal and verbal stimuli delivered by computer or electronic devices (Fast For Word, Earobics, Phonofix, Patsy, Audiolog, ...) make interhemispheric exercises possible, which are particularly appropriate for home-based therapy activities and provide a good opportunity to involve parents or siblings in the remediation process.

4/ Compensatory strategies

One of the most important components of any CAPD management program is counselling the child to become an active listener, well-aware of his own listening and communication capabilities and his own auditory-verbal skills.

However, to achieve a maximum of successful and suitable-for-daily-use strategies, training sessions should include the rules of language, chunking, verbal rehearsal, paraphrasing, the use of external aids and increasing self-motivation.

These specific strategies offer the child (or adult) possible individual ways on how to overcome residual difficulties.

References

This recommendation was created and approved in a multidisciplinary cooperation between professionals of all audiophonologic disciplines, which are medicine, pedagogy, speech therapy, psychology and hearing instrument audiology.

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