Children with auditory processing difficulties

Also known as central auditory processing disorder or CAPD

General information

Central Auditory Processing Disorder (CAPD) or Auditory Processing Disorder (APD) is an inability to process what’s being heard. It describes a variety of problems with the brain that interfere with the processing of auditory information. The causes of this difficulty are often not known.

Children with CAPD or APD:

- Will often pass hearing checks but may mis-hear and therefore not understand spoken language. There is a problem with the way that the messages are passed to the part of the brain that controls making sense of what we hear.
- Will have difficulty in hearing the difference between similar sounding speech sounds or words and this may affect their use of these sounds or words in their own speech.
- Are usually just as intelligent as other children their age but typically have low academic performance.

CAPD or APD is hard to diagnose and may co-exist with other conditions such as specific language impairment, attention deficit disorder, attention deficit hyperactivity disorder or learning difficulties.

Helping to access the phonics screening check

<table>
<thead>
<tr>
<th>Possible issues</th>
<th>Ways to help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children with CAPD or APD can often have typical understanding of language and be able to understand the instructions. This should be checked with the child</td>
<td>A child with CAPD or APD may be very easily distracted and will struggle in a noisy environment</td>
</tr>
<tr>
<td>The check will need to take place in a quiet, distraction free area</td>
<td>The adult should make sure they have the child’s full attention before giving each item on the phonics screening check. If the child’s attention span requires it, administer the checklist over more than one session</td>
</tr>
<tr>
<td>Children may need extra time to process what they have heard</td>
<td>They should not be subject to a time constraint</td>
</tr>
</tbody>
</table>

General information

Central Auditory Processing Disorder (CAPD) or Auditory Processing Disorder (APD) is an inability to process what’s being heard. It describes a variety of problems with the brain that interfere with the processing of auditory information. The causes of this difficulty are often not known.

Children with CAPD or APD:

- Will often pass hearing checks but may mis-hear and therefore not understand spoken language. There is a problem with the way that the messages are passed to the part of the brain that controls making sense of what we hear.
- Will have difficulty in hearing the difference between similar sounding speech sounds or words and this may affect their use of these sounds or words in their own speech.
- Are usually just as intelligent as other children their age but typically have low academic performance.

CAPD or APD is hard to diagnose and may co-exist with other conditions such as specific language impairment, attention deficit disorder, attention deficit hyperactivity disorder or learning difficulties.
The outcome of the check

Children with CAPD or APD may:

- Confuse similar-sounding graphemes, for example saying ‘b’ for ‘p’ or ‘m’ for ‘n’. This is because they have difficulty hearing the differences in these sounds.
- Have short-term memory difficulties and consequently recall only the end of words, for example they might sound out ‘s_c_r_i_b’ but be unable to recall the first part of the word and say, ‘rib’.
- Sound out words correctly but use similar sounds when blending so might sound out ‘ph_o_n’ and then say, ‘bone’.

Responding to the outcome of the check

If possible, provide the child with phonics teaching in very small groups in a quiet environment. They may benefit from:

- Additional phonological awareness training to strengthen their phonic knowledge and skills required for phonics learning.
- Opportunities for over learning and repetition of class based phonic work.
- Visual cues, for example Cued Articulation to help a child with CAPD or APD make sense of what they’re hearing.
- Practice to improve some of the skills they find difficult, for example short-term memory work.

Approaches to reading other than the phonics approach should be incorporated into teaching, as a child with CAPD or APD is likely to always struggle with phonics. Whole word approaches, comprehension monitoring, spelling patterns and colour coding of sounds, for example, will give a child with CAPD or APD a range of approaches to use when learning to read.
An evidence resource to inform next steps

There is little concrete evidence about intervention strategies for children with CAPD or APD. This is partly due to the overlap with so many other types of difficulty.

Support for children with CAPD or APD is often described as being ‘bottom up’ and ‘top down’. Bottom up intervention consists of things like acoustic signal enhancement (making the spoken message louder and more accessible) and auditory training where children practise the skills that they find difficult.

Top down intervention includes cognitive, metacognitive and language strategies, for example using the context to work out the meaning. The American Speech-Language-Hearing Association (ASHA) recommend that a range of strategies are introduced in a range of contexts to get best results.

Bottom up interventions often include formal programmes for auditory training (like FastForward and Earobics) and informal interventions. Research has shown that these formal interventions alone have not made significant differences for children in terms of improving their skills. However, it was found that an informal approach to auditory training, in combination with ‘top down’ support strategies such as metacognitive awareness, increased skills.

Additional resources and further support

You could refer the child to speech and language therapy and audiology support.

Publications and resources:

Organisations and websites:
I CAN – www.ican.org.uk
Afasic – www.afasic.org.uk
Deafness Research – www.deafnessresearch.org.uk
Auditory Processing Disorders UK – www.apduk.org.uk

33 Putzer-Katz et al, 2002
Case Study

Joel is finding it really hard at school. Although people generally think he’s a bright boy, he never seems to follow instructions and often says things like ‘what’ or ‘huh’ when he’s asked to do something. As well as English, Joel seems to really struggle to work out things like maths puzzles or describe what’s happening in science.

Staff can get frustrated with him because often, if they repeat what they said again, he will do it. Lots of people think he doesn’t listen because they know that they gave their instruction loud enough for him to hear it.

During the phonics screening check Joel found it hard to hold the sequence of sounds and blend them; he often forgot the first sound and so got it wrong. He made mistakes on the sounds that sounded similar and said things like ‘tig’ instead of ‘dig’.

What helps Joel

When he was given extra teaching of phonological awareness, he became better at hearing sounds in words. His teaching assistant used Cued Articulation and it helped him to ‘see’ the sounds as well as hear them.