

Listening difficulties and Auditory Processing Disorder

Introduction

At your recent appointment, you explained that your child has been struggling to hear in specific situations.

When there are concerns about a child's ability to follow conversation, it is important to rule out any underlying hearing loss.

Hearing assessments typically measure the quietest sounds a child or adult can hear at different speech frequencies. Even with hearing deemed to be normal, individuals can have varying abilities to understand and process verbal and auditory information. If someone struggles outside of normal variation following speech, this indicates an auditory processing difficulty, sometimes diagnosed as Auditory Processing Disorder (APD). This leaflet will give you more information about APD and how to support your child.

Auditory Processing Disorder (APD)

APD describes difficulties with how the brain interprets the sound signals it receives whereas someone with a hearing loss has problems with sound movement through the ear.

Children with APD are likely to struggle to hear more than their peers when there is background noise, such as in the classroom. Other difficulties include accents, hearing where sounds are coming from or muddling similar sounding words. These difficulties can cause reduced concentration and problems following or understanding verbal instructions.

Often families first request a hearing assessment for their child due to concerns about hearing loss only to find the results show hearing thresholds are within normal limits.

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Causes of APD

Research into APD is ongoing and the causes are still being investigated. For some individuals with APD, difficulties are reported from a young age, whereas for others, there is a known trigger to the difficulties, such as a brain injury. Other times, parents experience similar difficulties to their children which indicates that APD may be hereditary, research around this is still ongoing.

APD is more common for those who have had middle ear problems when younger, such as recurrent ear infections or persistent glue ear, or those that have a history of auditory deprivation (periods without regular access to spoken word or other sounds).

APD often co-exists with other conditions such as dyslexia, autism/autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), attention deficit disorder (ADD), language processing difficulties, poor attention and poor short-term memory.

Supporting someone with APD

While there is no instant cure or fix for APD, children and young people with the condition can see great improvements if their difficulties are supported by their school, family and those around them. The support needed fit into four categories:

Acoustic adjustments

Suggestions include adding soft furnishings to reduce echo and moving away from open windows, doors or computer fan noise in the classroom.

Communication tactics

This includes making sure that the person catches your child's attention before speaking, ensuring that their face can be seen. Background noise should also be reduced. Visual aids can be used, such as picture reminders or written instructions.

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Auditory training

This includes musical training (learning an instrument) or listening practise with speech. Auditory training can be using online or phone app resources, such as the 'Hearoes' app, or by practising listening skills in different situations with family members voices.

Assistive listening devices

Use video calls rather than a phone call to speak to family so that faces can be seen. Older teens may opt to use Live Listen via an apple iPhone and AirPods or using other assistive devices.

With the right support and adjustments, the effects of APD can reduce as children get older. Most children and young people are able to do well in school with reasonable adjustments in place.

Recommendations

It is important to put in place adjustments to give your child the best access to sound and information around them, especially in an educational setting.

You will find enclosed the British Society of Audiology (BSA) recommendations for those with APD. We suggest sharing the relevant recommendations with your child's school or education provider.

Some of the key recommendations include:

- Making sure that the child is sat near the front of the class. This should be in a position where they are able to hear the teacher and see any visual information (such as the interactive board).
- Catch the child's attention before speaking. Continue to check that you have their attention during explanations or long instructions.

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- Make sure that the child is able to see your face when speaking. Consider the effect of lighting and avoid standing in front of light sources.
- Use visual aids to confirm what is said. With younger children, pictures can be used to remind them of the steps to a task. Older children are likely to benefit from information written on the board or worksheets.
- All tasks to be completed at home or at a later date should be given in a written format.
- Reduce distractions such as noise from others, background noise from outside the classroom or any other visual/sensory distractions.
- Speak in a clear voice at a steady rate. Be careful not to over articulate or speak too slowly.
- Check that the child has understood by asking them to explain what they need to be doing.
- Reduce background noise when speaking by asking others to stay quiet during instructions. This can be achieved by adding soft furnishings, soft display boards and by closing doors and windows if there is background noise from outside.
- Use subtitles on videos once the child is confident with reading.
- Trial short (5 minute) listening breaks away from class, particularly for information heavy subjects.

Often schools are able to put in place these reasonable adjustments without a formal APD diagnosis. Please get in touch with the department to request a Paediatric Hearing Therapy appointment if you would like customised recommendations written for your child's current situation and difficulties. When getting in touch let us know the best way to contact you. Typically email conversation is used as this allows you to respond when available and gives time if you wish to check details with family or teachers.

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Referral for formal APD assessment

If, after reading this information about APD, you would like a formal assessment for your child please contact the department. We will be happy to discuss this request further.

Specialist APD assessments do not take place within the Gloucestershire Hospitals NHS Foundation Trust. There are only a few specialised test centres within the UK. However, we are able to refer children who meet the referral criteria to University College London Hospitals (UCLH). Referrals for assessments can be made by Audiology, Speech and Language Therapy, Occupational Therapy or your GP.

The assessment is a half day assessment at the clinic in London. This appointment includes 2 to 2.5 hours of hearing assessment and an appointment with the doctor where you can discuss your concerns and your child's development.

UCLH's current referral criteria:

1. Developmental age of 7 years or above.
2. English as a first language.
3. The ability to perform a standard hearing test.
4. Audiological testing completed within 3 months of the referral date which shows:
 - a. Hearing within normal limits on both sides.
 - b. Normal middle ear function in both ears.
 - c. Normal inner ear function on both sides using Transient evoked Otoacoustic Emissions (TeOAE) test.
5. Symptoms indicating APD.
6. Non-verbal IQ better than 85.
7. If there are difficulties with learning, a formal standardised speech and language (CELF assessment) or cognitive assessment should be performed. Reports need to be sent with referral.
8. If there are no school or academic concerns, we will need a copy of the most recent school report which confirms that the child performs at a level deemed 'average' for all core subjects.

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Any reports from speech and language therapists, educational psychologists and paediatricians should be attached with the referral.

For children with suspected co-existing conditions (such as autism, ADHD or ADD or language disorder) should have these investigated first so that reports can be sent with the referral. This allows for your child's needs to be fully considered during assessment.

Next steps

Often having a better understanding of difficulties, awareness of strategies to help and knowledge of APD will help you and others support your child to gain confidence and reach their potential.

We have enclosed an information sheet designed for children with APD from APD UK that may help your child to understand their hearing and listening better.

Please get in touch if you have any questions, would like onward referral or require further support over the next 12 months. We have not arranged any further appointments at this time. We would be happy to receive a new referral if required after the 12 month period.

References and useful links

British Society of Audiology, 2011, An overview of current management of auditory processing disorder (APD)

www.thebsa.org.uk/resources/overview-current-management-auditory-processing-disorder-apd/

APD UK:

<https://apdsupportuk.wixsite.com/apd-support-uk>

University College London:

www.uclh.nhs.uk/patients-and-visitors/patient-information-pages/auditory-processing-disorder-guide-help-your-auditory-perception

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Contact information

Paediatric Hearing Services
 Gloucestershire Royal Hospital
 Great Western Road
 Gloucester
 GL1 3NN

Tel: 0300 422 8210
 Monday to Friday 8:30am to 4:00pm

Email: ghn-tr.paediatric-hearing.svcs@nhs.net

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Making a choice

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation

* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>