My son has Auditory Processing Disorder – APD

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Anne Dixey on a little-known disorder that may affect the school progress of one child in ten

When football dad Kai Vacher wants to shout at his son to take the ball up the wing, he has to restrain himself. For, although Ben, 7 (right), can hear, he can't understand. He has auditory processing disorder (APD), a listening difficulty that could affect 10 per cent of children. Kai and his partner Anna had wondered about Ben's hearing since he was little. "Every time he went to playgroup he would say, 'Something is wrong with my ear; there is always a rushing sound like rain'," Anna recalls. But when a teacher suggested he might be deaf the hearing tests came out normal.

Anna gave up her job as a secondary school teacher to help Ben. Her shelves are filled with files, letters and research. It has taken Anna and Kai nearly four frustrating years to get a diagnosis for Ben's condition. They went from GPs near their home in East Sussex to local speech therapists, audiologists and ear, nose and throat specialists until the final, firm diagnosis of APD at Great Ormond Street Hospital, in London.

APD is a listening disorder rather than a hearing disorder; the problem lies in the brain rather than the ear. For any sound to be registered, signals from the ear must be translated by the brain, but children with APD have trouble registering or processing these signals. The exact reason is not yet understood.

Awareness of the condition is comparable to dyslexia 20 years ago. GPs often haven't heard of it and, although the US has led the way in highlighting the condition, there is no routine test. One of the problems is that experts say it is difficult to diagnose before the age of 7 – a child is changing so fast before that age.

How well an affected child listens seems to depend on the situation he is in, and noisy environments are most problematic. Kai, a former teacher and now an education consultant, describes it as like "living with a child who is periodically deaf". Communicating one-to-one is fine, but Ben is lost in a crowd. "When he is at a birthday tea with eight or ten kids he hasn't got a clue what is going on. He will look at the faces and laugh, but there is a slight delay."

The Vachers, along with Ben's 12-year-old sister Lizzie, were ecstatic when Ben's condition was finally diagnosed but then began the struggle to find the right treatment. A breakthrough came with the loan of a radio microphone system from the National Deaf Children's Society – Ben's teacher wore a microphone and he had a receiver. During that eight-month period he came home "skipping and laughing." The teacher's voice had been distilled out of the background noise.

But since the microphone system had to be returned at Christmas, at the end of the loan period, he has been in a class of 35 without the equipment. Anna says: "Four times a day he gets pain in his ears and has to leave the classroom – the teacher says he is struggling. It is about his wellbeing, too. Now it is awful, he comes in from school and just curls up."

Ben has an added hearing sensitivity that means he hates the noise of fireworks or even a hairdryer. But his listening problem does not mean that he cannot appreciate music. "He is very musical and plays the violin and piano," Kai says. "When he hears a song on the radio he will sing the tune perfectly – but he will get the words wrong."

The family is currently in discussions with the local authorities and hope to get another microphone system for Ben to use at his village state school. They cost about £1,300.

Computer training can help APD sufferers

Dilys Treharne, an APD specialist at Sheffield University, says: "We think about 10 per cent of kids have got it – that's a lot of children. Some of them cope quite adequately with it but some really struggle. You cannot cure it but a lot of work can be done to ameliorate the problem."

Options include cutting noise in the classroom with carpeting, radio microphone systems and computer programs. Addison Primary in Brook Green, West London has just joined a handful of other state schools nationally using Fast ForWord (FFW) intensive computer training, aimed at children with APD and other disorders such as dyslexia. The programme uses games that reward learners when they listen carefully, correctly recognising sounds or accurately following on-screen instructions.

Pete Dunmall, the head teacher, had never heard of the condition but, when one pupil was given a firm diagnosis, he decided to use the internal budget to fund FFW for six children who might benefit. "We just want to see what impact this programme has with these children and then evaluate," he says.

Diagnosis of APD is complicated when children also suffer from other conditions with similar symptoms. Difficulties with reading might be due to dyslexia and problems concentrating because of attention deficit disorder.

Professor Dave Moore, the director of the Institute of Hearing Research, describes it as a "referral lottery" in which a child sent to an audiologist might be told he or she has APD and one sent to a language specialist might be told that they have dyslexia.

To find out more about the problem, the institute is testing the listening abilities of 1,600 children, aged 6 to 11, in Glasgow, Cardiff, Nottingham and Exeter. Professor Moore describes it as "the most thorough research being done in the world on the subject", and it is attracting international interest. The research will help provide an estimate of the prevalence of ADP, with the ultimate aim of developing an accessible, standard diagnostic test.

Word in your ear

What is auditory processing disorder? Hearing starts in the ear, sounds are sent to the brain and the brain interprets them so we can understand. In a child with APD, the brain has difficulty translating the sounds.

What's the cause? It might run in families and there could be tiny differences in the way brain cells send messages or are joined together. Middle-ear disease ("glue ear") may also be a cause.

The symptoms APD sufferers have difficulties understanding spoken messages, using speech, reading and remembering instructions.

The diagnosis GPs will refer patients to speech therapists and audiologists who will use a battery of tests.

The treatment Reducing background noise at school and at home can help; as can sitting the child next to the teacher and checking understanding. There are also hearing training programmes, classroom listening devices or radio microphone systems.

For more information visit apduk.org or defeatingdeafness.org.

Source: MRC Institute of Hearing Research; the British Society of Audiology; APD Steering Group

The original article can be found here in full http://women.timesonline.co.uk/tol/life_and_style/women/body_and_soul/article3458710.ece



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