Brain and Behaviour in Dementia:

Parietal Lobes

Transcript

Female presenter:

The parietal lobes lie here and here above the ears. The parietal lobes are extremely important to help us with all aspects of day to day life, from understanding what is said to us, helping us put our words together, to how to do familiar tasks such as recognising people and objects, finding our way around, and even using money. These skills are often affected fairly early in Alzheimer's disease, although not necessarily all at once. The main role of the left parietal lobe is to help us to produce speech and writing and it also helps us to understand other people's speech and writing. It talks to the left temporal lobe which as we heard before is involved in storing memories for words. As you can imagine, if this area becomes damaged by the illness, the person will have increasing difficulty understanding what is said to them and what they have read, as well as in making themselves understood to others. This is what happens fairly early on in Alzheimer's disease, often starting with trouble finding the right word for something.

Sufferer 1:

It's a beautiful plant...I don't know the name of my plants...but I just call them "my plants".

Female presenter:

As the damage becomes worse, speech can become sparse and spare of meaning, and difficult to understand, and this can cause real frustration, as sufferers and carers struggle to understand each other.

Carer 1 (to sufferer):

It can get a bit lonely, can't it? Eh? When you can't speak and you can't talk back.

Carer 2:

Word finding difficulties are his...em...principal problem.

Male presenter:

Tell me a bit about that. Can you expand?

Carer 2:

Well starting a sentence and can't get more than two or three words into it, and he can't find the words. I think he knows what he wants to say, but the words just won't come. Occasionally, I say, 'well, just think about it, just don't say anything for a minute', and he may get it back, but not every time.

Male presenter:

How does he respond to that?

Carer 2:

Em, a bit frustrated, yes, but he can treat it with a sense of humour, and I've become a very good guesser as well at what he's going to be talking about.

Carer 3:

Well the words go back to front, and, em, the words come out wrong as well. Yes, his whole language is completely different now. He says the wrong things. As I say, his words are back to front quite often. He says the last thing, first.

Sufferer 1:

Instead of saying it at the front, I'd say the story that I'd say and when I finish, I'd say I say first and then it'd come out the end of the sentence.

Carer 4:

It seems that there's something wrong with the way her mouth works in speaking and it doesn't come out at all, just as a sort of a jumble of words.

Male presenter:

It is often helpful at this stage to talk slowly and clearly about what we want the sufferer to know and to stay as calm as possible. If they get flustered, it is very likely it is going to be even more difficult to get across what you want to them.

Female presenter:

Calculation is another function of the left parietal lobe, and if there is damage here, people will have difficulty handling money, and paying bills.

Carer 2:

He's not terribly good with using money any more. He can't work out ... if he's told something costs a pound, he can't see the pound in the palm of his hand.

Male presenter:

The parietal lobe on the other side, usually the right hand side, is what gives us our sense of geography – where we are, and how we know where we are. If this area gets damaged, then people are likely to get lost in once very familiar surroundings, even at home. They may not even be able to find an item in a kitchen that they've been familiar with for years.

Carer 4:

She has no idea where things are in the flat, where the rooms are, even whether it's our flat. She will often say to me, 'when are we going home?', and when she goes to the toilet, I have to lead her to the toilet, because she can't find it. If she wakes up in the night, I usually wake, although I'm in the next room, I usually wake up and see her walking past my room but she's looking for the toilet, and she's walked straight past it, 'cause she has the en-suite toilet in her bedroom, and she doesn't know where anything is in the apartment, and when on occasions when we have tea and biscuits or something, she likes to take the cups out to the kitchen, but they never reach the kitchen. They could be in the bedroom, they could be in the bathroom, they could be anywhere.

Carer 5:

He will say, em, 'what time are we going home?' He doesn't always realise that we are at home.

Female presenter:

The parietal lobes on both sides also help us to recognise people and objects. If there is damage here, then people may not even be able to recognise familiar people, such as husbands, wives or children. In some cases, they may not be able to recognise themselves, and this can be very distressing when someone's looking into the mirror and sees a stranger looking back at them. It can also affect the ability to recognise objects so even a relatively straightforward task such as picking up the keys on the way to the front door can be difficult. The person sees the keys but simply doesn't recognise them.

Male presenter:

The parietal lobes also help us learn patterns of movement and to do simple and familiar tasks such as brushing our teeth, or getting dressed, and also to do more

complex tasks such as cooking a meal, driving a car, or playing a piano. Although these may be simple and familiar, as the illness progresses, it disrupts these familiar patterns so the sufferer finds it difficult or impossible to complete what they're trying to do. A common example of this is difficulty getting dressed. For instance, a sufferer may have difficulty putting their clothes on in the right sequence or even the right way round.

Carer 6:

He'll have knickers on top of knickers, and jumpers and then vests on ... he goes through the drawers and he literally has a fancy dress parade.

Male presenter:

Unfortunately, even though these tasks may have once been simple and familiar, once this part of the brain is affected, no amount of explaining, showing or encouragement will bring back those old abilities. However, people may still be able to do some parts of the task, and should be encouraged to do so to keep them active and interested.

Carer 6:

Now it's getting difficult even with his shaving. I'll put the shaver on, I'll give it to him and he'll go, 'hello?' as if it's the telephone.

Male presenter:

Try not to take over if possible. You may find they still enjoy doing some things for themselves with some help.