

# **MEMORY PROBLEMS AND MULTIPLE SCLEROSIS**

**Dr Annie Hickox  
Consultant Clinical Neuropsychologist  
Friarage Hospital, Northallerton.**

## **Where has it gone?!**

Watching a film last night with my husband, I tried to recall the name of an earlier film we had both enjoyed several years ago. 'What was the name of the film?' he asked. I replied that I couldn't remember but it starred a well-known blonde American actress in it, whose name I couldn't recall. Instead, I tried to prompt him by saying, 'you know who I mean!'. As he was clearly unaided by this, I then wracked my brain to recall the actress's name. 'She's...you KNOW her name, I just can't think right now, but it will come to me.' Not surprisingly, this sparse and vague information did not jog his memory any further, and more worryingly for me, it did not jog my own. In fact, the more I searched for the name, the further it seemed to distance itself from my recall.

I use this anecdote to demonstrate that everyone suffers from recall problems at times. But when a person has MS, they may find that their recall is worse than it was prior to their illness. Many of my patients will share the sense of frustration as a seemingly 'tip of the tongue' word or name quickly slips away in spite of increasing efforts to articulate it.

In MS, memory problems are common but are not always a sign of serious cognitive impairment. More often, I can see that the person's trouble with word retrieval arises from stress, or from a delay in the ability to access information that is stored in the brain. As the example above suggests, we often have the elusive word stored somewhere, but the problem lies in retrieving the information.

## **The memory process consists of three main components:**

- Encoding: accepting new information so that it enters our working memory.
- Storage: 'filing' the information correctly and logically until we need it again.

- Retrieval: recalling the information when needed. Usually this process is quick and smooth, but is very noticeable when it goes wrong. Stress and neurological illness can play havoc with retrieval processes.

## **The Role of Stress.**

When we are stressed, particularly when we are chronically stressed, a number of changes take place in the way that our memory works. We may be distracted, and therefore not registering the information (often associated with a sense of 'I'll never be able to remember this', for example, when hearing a new name). This in turn can prevent us from holding on to the information long enough for it to be stored. And finally, we may not be able to retrieve the information. We may know full well that we have the information filed away but cannot get access to it. When we react to this by becoming stressed and anxious, we actually decrease the chance that we will be able to retrieve it, as stress itself leads to changes in the brain that inhibit our ability to retrieve information efficiently. You will be familiar with the experience of later on seeing a reminder, or perhaps simply feeling relaxed, and finding that the word or name pops back into your mind, often when you no longer need it.

## **Strategies that can help with storing and retrieval:**

*Intending to remember:* When listening, or reading, deliberately intend to remember the information. Focus on the words, and make an effort to filter out distractions, including anxiety.

*Rehearsal:* Once you have heard the information, or have read it, recap it in order to give your brain a second chance to process the information. You can do this out loud, ('so let me make sure I've got that right, you're travelling to Spain next week and coming back in a fortnight'), or you can mentally rehearse the information. This simple exercise deepens processing, and improves your chances of having the information available later for recall.

*Using Associations:* Make the information more meaningful by linking it to something else. Using visual imagery to make a dramatic picture in your mind (e.g. picture your PIN numbers as huge figures, sitting on the chairs and sofa of your living room)

which will be easy to recall. Images that are salient are more likely to be recalled than information just on its own.

*Prompting:* Organisational strategies such as lists, notebooks, calendars, or memo boards may seem unnecessary, but in fact they increase the frequency with which we scan information, and can serve as valuable prompts when we are trying to retrieve information. Many people who 'draw a blank' when asked about what they've been up to over the past week, are quickly able to recall events when they see a word or an image that cues recall.

*De-stress:* And finally, for those frustrating 'tip of the tongue' moments referred to at the beginning of this article, the best method is to take a few relaxing breaths, relax, find another way to describe things, and let go of the self-defeating struggle to find the missing word. Chances are, if you stop chasing it, the word will come to you more willingly.

*It works, if you work!*