Case studies

Case 1 Functional memory symptoms
Elizabeth, a 52-year-old administrative assistant, is concerned because she finds it harder to keep on top of things at work than she used to. She gives examples of specific occasions on which colleagues had to remind her about a task she had neglected to complete, and how embarrassed she felt. She has taken to noting everything down on her smartphone. She has trouble remembering people's names and even left the house unlocked last week, which was very unlike her. She is a single mother bringing up three teenage sons. Her mother was diagnosed with Alzheimer's disease in her early seventies. Elizabeth is worried that she might be developing the same condition.

Case 2 Alzheimer's disease
Paul is a 56-year-old secondary school teacher. Over the past year, he has noticed occasional difficulty remembering the names of his students and details of conversations he has had. Some colleagues have commented that he has become less reliable. This had been attributed to the appointment of a new headmaster, with whom Paul had some disagreements. However, last month, Paul got lost driving home from work, a route he has travelled for years. Paul's wife reports that he had difficulty executing his mother's estate earlier in the year, and has become 'generally more vague'. There is no significant past medical or family history. The neurological examination is normal. On the GPCOG, he scores 9/9. However, formal memory testing reveals an isolated deficit in delayed episodic memory. He was initially able to learn a short story, but 30 minutes later had no recollection of it. His MRI head scan reveals subtle volume loss in the medial temporal lobes bilaterally.

Case 3 Frontotemporal dementia (behavioural variant)
Jackie is a 60-year-old taxi driver. Her family reports a gradual change in personality and behaviour over the past two years, although Jackie denies any such problems. Customers have complained that she has exhibited road rage and inappropriate language on a number of occasions. At home, Jackie has become more self-centred and lacks empathy. Recently, when her granddaughter fell and cut her head badly, Jackie asked her to keep the noise down as she was watching her favourite soap opera. She gets through a bag of chocolate sweets a day, and has put on 3 stone in weight. Jackie's mother died of motor neurone disease five years ago. At interview, Jackie is fatuous and distractible. Her performance on cognitive screening is unimpaired, although she appears not to take it seriously. An MRI scan of the head shows a reduction in the volume of the frontal lobes bilaterally, with normal hippocampi and posterior regions.

Case 4 Primary progressive aphasia (non-fluent variant)
Saghir, a 59-year-old healthcare assistant, has experienced progressive difficulty finding words when speaking. He notices this particularly on the telephone, and at work where he has problems pronouncing longer words such as drug names. At interview, his speech is effortful and distorted. He uses phonemic paraphasias, saying 'selezant' instead of 'elephant'. He is able to name a shirt, but calls the cuff a 'sluff'. He is unable to repeat 'British constitution' and 'baby hippopotamus' accurately. He has trouble following multistage commands. Neurological examination is otherwise unremarkable. The MRI of the head is reported as normal.

Case 5 Posterior cortical atrophy
Sandra is a 65-year-old lady with a passion for lepidoptery. Last summer, she noticed that she was having increasing difficulty discerning butterflies from flowers in her garden. When she did find a butterfly, it seemed to vanish the moment it jumped to another flower. Over the past year, the visual problems have worsened: she reports being unable to find the orange juice in the fridge in the morning, even when it is right in front of her eyes; she struggles to follow the lines of words in magazines; and she finds driving at night frightening as objects seem to leap out of nowhere at her. She has gone through three new pairs of spectacles to no avail. On examination with a Snellen chart, her visual acuity is perfect. However, she is unable to locate a pen on the desk until it is moved clear away from other objects. On cognitive testing, she draws a very distorted clock face but her memory and language skills are apparently intact. The MRI shows loss of volume in the occipital and parietal cortex, particularly on the right side.