

Posterior Cortical Atrophy

About the condition

Posterior Cortical Atrophy (PCA - also known as Benson's syndrome) is a progressive degenerative condition which causes damage to brain cells at the back (posterior) of the brain. This area is responsible for processing what we see.

In the vast majority of cases, the loss of brain cells is associated with the same brain changes seen in Alzheimer's disease, namely plaques and tangles. However, it can also be due to other diseases including dementia with Lewy bodies and Creutzfeldt-Jacob disease.

Whilst caused by the same disease process, the effects of PCA and Alzheimer's disease upon the behavior and thought processes of people with each condition are very different. Alzheimer's disease is most commonly associated with deterioration of memory and a progressive decline in language, perception and planning skills. People with PCA tend to have well preserved memory and language but show a decline in vision and experience difficulty with performing skilled movements and with reading and writing. This is due to the brain not being able to interpret and process information received from the eyes.

Changes that might happen

People with PCA generally experience some of these changes associated with vision:

- difficulty recognising familiar objects and faces
- increased sensitivity to bright lights or shiny surfaces
- double vision
- particular difficulty seeing in fading or low light conditions
- difficulty judging distance/speed/perspective – this can cause problems with stairs, recognising the speed of traffic, reaching out for things or putting things down on surfaces
- stationary objects may appear to move.

Some changes are hard to understand, such as being able to see small print easier than large print, or the person not being able to see something that is right in front of them – then suddenly seeing it. This can cause frustration for the person with PCA and their support network, especially if the changes are not fully understood.

Other possible changes include difficulties with:

- reading, writing, emailing, texting – this can include spelling, and remembering the shape and name of letters or numbers
- mental arithmetic and dealing with money and change
- coordination and making gestures e.g. waving
- using particular tools i.e. cutlery, scissors, glasses
- dressing/undressing (particularly zips, buttons, ties, putting arms in sleeves, legs in trousers)
- finding the chair when trying to sit down.

Things to consider

Although there is no specific treatment for PCA, people with the condition may find some of the medications used to treat Alzheimer's disease helpful. These medications include donepezil (Aricept), rivastigmine (Exelon) and galantamine (Reminyl). However, these medications are only designed to treat the changes of the condition and are not a cure.

People with PCA often have a good deal of insight and are very aware of the problems they are experiencing. Many will struggle to come to terms with the loss of their visual world, often feeling that they have lost their independence and can no longer enjoy things that they used to, like driving or reading.

However, there are many visual aids that are designed to make life easier for people with visual impairments. These include talking clocks, simplified mobile phones, cooking aids and talking books and audio recordings. Clothing and footwear can be adjusted to enable easier dressing and promote independence. Developing coping strategies for people with PCA is essential to enabling them to live as independently as possible.

Useful information

More information about PCA can be found at:

- www.ucl.ac.uk/drc/research/posterior-cortical-atrophy-pca
- www.raredementiasupport.org/posterior-cortical-atrophy/
- www.alzheimersresearchuk.org/dementia-information/types-of-dementia/posterior-cortical-atrophy/