Reading and vocabulary decline with brain changes

Changes to the brain from Alzheimer’s disease or stroke may cause a drop in people’s reading abilities and vocabulary, even in people who haven’t actually been diagnosed with dementia.

What do we know already?

In advanced dementia, people may lose the ability to read or remember the meaning of words. But in early dementia, many people seem to retain their vocabulary and reading ability. For this reason, simple reading and vocabulary tests are sometimes used in the early stages of dementia as a ‘baseline’ to establish people’s usual level of mental ability. However, this assumption has never been properly tested. Now a study has looked at more than 400 elderly men and women (all monks or nuns) who had regular tests of their reading and vocabulary every year until their death, and who were then given a post-mortem examination to assess whether their brain showed signs of damage from Alzheimer’s disease or stroke.

What does the new study say?

The people whose brains showed the most damage after their death also had the biggest and fastest decline in vocabulary and reading ability.

How reliable are the findings?

Each person in the study had at least two checks on their vocabulary and reading, and some had as many as 15. The post-mortem examinations were all carried out to the same process. This means the results should be fairly reliable.
What does this mean for me?

This study suggests that reading and vocabulary is affected by early dementia, so may not be the best test to demonstrate the usual mental abilities of people when they are being investigated for dementia.


This summary was prepared by the staff of Best Health, BMJ Group's patient information service. This information does not replace medical advice. If you have a medical problem please see your doctor.