



Healthy ageing conference

Skin test for Alzheimer's

AUSTRALIAN researchers have developed a skin test that can diagnose Alzheimer's disease and mild cognitive impairment up to two years ahead of standard clinical tests.

Associate Professor Zeinab Khalil, deputy director of the National Ageing Research Institute at the University of Melbourne, said the test could identify vascular changes associated with dementia.

In Alzheimer's disease, amyloid β protein damaged vascular endothelial cells, causing the release of vasoconstricting toxins, Professor Khalil told a recent conference on healthy ageing and longevity in Brisbane.

These endothelial changes were measurable in the peripheral circulation using laser Doppler flowmetry.

"It's a 10-minute test and the results are immediate." Professor Khalil told

Australian Doctor.

"We administer [the amyloid β protein] and we monitor the effects of this chemical on the blood flow, because this chemical specifically activates the cells that we know are damaged."

In patients with Alzheimer's disease, the test had 80% sensitivity and 90% specificity relative to the gold standard clinical diagnostic test. The test was also able to identify patients with mild cognitive impairment.

The technique is currently being used at the University of Melbourne as an adjunct to clinical diagnosis, and further research is being conducted to validate the test for mild cognitive impairment.

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