Alzheimer's proteins in eyes may be key to early detection

Efforts to detect Alzheimer's disease earlier and more cheaply are focusing on signs of the ailment in the eye and sense of smell.

Scientists have found that certain biological changes in the retina and lens of the eye, and in the sense of smell, may help predict whether people with no or minor memory issues may go on to develop the progressive brain disease, according to findings presented here Sunday at the Alzheimer's Association International Conference.

Alzheimer's disease is diagnosed primarily by clinical examination using memory tests and questions about how a patient is functioning. But researchers are attempting to devise tools, particularly using biological markers, to improve the detection of early stages of the disease, said David Knopman, a neurologist at Mayo Clinic and a member of the Alzheimer's Association Medical and Scientific Advisory Council.

The disease's pathology in the brain typically begins decades before the appearance of memory symptoms.

Looking for changes in the eye or smell represent "simpler, less invasive" methods that are more feasible for use in doctor's offices and other clinical settings, Knopman said.

Read the full, original story: Key to detecting Alzheimer's early could be in the eye