Alzheimer's Linked to Bacteria

As we continue to live longer the challenges of maintaining a high level of brain function grow. Cognitive abilities are affected by a wide variety of disorders, but perhaps the most well known is Alzheimer's Disease. Last month a study was released in the prestigious Journal of Neurology which links the common bacteria helicobacter pylori to Alzheimer's.

Helicobacter pylori is a microaerophilic bacterium that inhabits various areas of the stomach and duodenum. It causes a chronic low-level inflammation of the stomach lining and is strongly linked to the development of duodenal and gastric ulcers and stomach cancer. Over 80% of individuals infected with the bacterium are asymptomatic. More than 50% of the world's population harbor helicobacter pylori in their upper gastrointestinal tract. Infection is more prevalent in developing countries. The route of transmission is unknown, although individuals become infected in childhood.

This is an important study – not only does it link the bacteria and Alzheimer’s Disease, but it shows that eradication of the bacteria has been successful in treating the associated symptoms of cognitive decline. Here’s the study abstract...

Eradication of Helicobacter pylori may be beneficial in the management of Alzheimer’s disease. Infectious agents have been proposed as potential causes of Alzheimer’s disease (AD). Recently, we documented a high prevalence of Helicobacter pylori (Hp) infection in patients with AD.

We aim to assess the effect of Hp eradication on the AD cognitive (MMSE: Mini Mental State Examination and CAMCOG: Cambridge Cognitive Examination for the Elderly) and functional (FRSSD: Functional Rating Scale for Symptoms of Dementia) status parameters. In the first part of the study, a total of 50 consecutive patients with AD and 30 age-matched anaemic controls underwent an upper gastrointestinal endoscopy, and gastric mucosal biopsies were obtained to detect the presence of Hp infection by histologic analysis and rapid urease test.

Serum anti-Hp-specific IgG level was analysed by enzyme-linked immunosorbent assay. In the second part, Hp-positive AD patients received a triple eradication regimen (omeprazole, clarithromycin and amoxicillin), and all patients were followed up for 2 years, while under the same treatment with cholinesterase inhibitors. Hp was detected in 88% of AD patients and in 46.7% of controls ($P < 0.001$). Hp eradication was successful in 84.8% of treated patients.

At the 2-year clinical endpoint, cognitive and functional status parameters improved in the subgroup of patients where Hp eradication was successful ($P < 0.001$ and $P = 0.049$ for MMSE and CAMCOG, respectively; $P < 0.001$ for FRSSD), but not in the other patients. Hp eradication may positively influence AD manifestations, suggesting a possible common link between Hp and AD.
This is good news for us all, but especially for those whose lives have been touched by Alzheimer’s Disease. The medical frontier holds much promise for the treatment and early detection of Alzheimer’s. Today, using brain imaging, we can detect the onset of the disease years before symptoms surface. Early detection and treatment are vital to delaying the debilitating symptoms of Alzheimer’s.

I write much about it in my book Preventing Alzheimer’s, which I co-authored with one of the world’s foremost physician experts in the field, William Rod Shankle, M.D. You can see more about the book by clicking here.

We also have much related information and several images of Alzheimer’s-affected brains on our website at www.amenclinics.com. If you suspect you or someone your care about is showing signs of cognitive impairment, please don’t wait to take action. There are many things you can do to delay, stop and even reverse brain function loss if you catch it in time.

To your brain health,
Daniel

Daniel G. Amen, MD
CEO, Amen Clinics, Inc.
Distinguished Fellow, American Psychiatric Association