Alzheimer's Disease

Although it was given it's name in the early 1900's we still don't know the cause of Alzheimer's disease. Not knowing the cause prevents us from finding a cure, let alone preventing the condition despite decades and billions of dollars in research. But a new direction has opened up for further research into the cause of neurodegenerative diseases. It's called chronic cerebrospinal venous insufficiency or CCSVI.

The term CCSVI comes from vascular surgeon Paulo Zamboni of the University of Ferrara in Italy. Dr. Zamboni attributes the cause of multiple sclerosis to CCSVI. He attributes the cause of the CCSVI to stenosis of jugular and thoracic veins. What is even more interesting is that he has been having remarkable success treating MS patients with balloon angioplasty to open the veins. Some surgeons prefer to use stents.

The role venous drainage issues play in the brain in causing neurodegenerative diseases is not new, however. I have been writing about it since 1987. If you do a Google search for "stenosis Alzheimer's" or "NPH Alzheimer's" you will find an article I published in 1990 calling for epidemiological research into the role of venous drainage issues in the brain in Alzheimer's disease.

When I first started looking for a possible cause of normal pressure hydrocephalus I found an old neurology textbook by Adams and Victor. In the section on NPH it stated that, "A matter of considerable interest is the role of blockage of the dural sinuses (the large main veins of the brain) in tension hydrocephalus. The problem is that blockages are rarely found."

In my opinion they were never found because researchers were focused on blockages in the first place, and in the second place they limited their search to inside the skull. In this regard back pressure against the vertebral veins, not blockage of the dural sinuses may be the cause of NPH. Furthermore, the back pressure may occur outside the skull in the upper cervical spine. Regardless of the source of blockage or back pressure, venous drainage issues in the brain can affect the CSF pressure gradient, which can lead to NPH as I will explain later.

Interestingly, in this regard, AD is oftentimes associated with NPH. NPH has also been associated, albeit less frequently, with Parkinson's Disease. Even now, however, NPH is still, in my opinion, wrongly considered to be a separate and distinct condition and I believe it is one of the root causes of many neurodegenerative diseases.

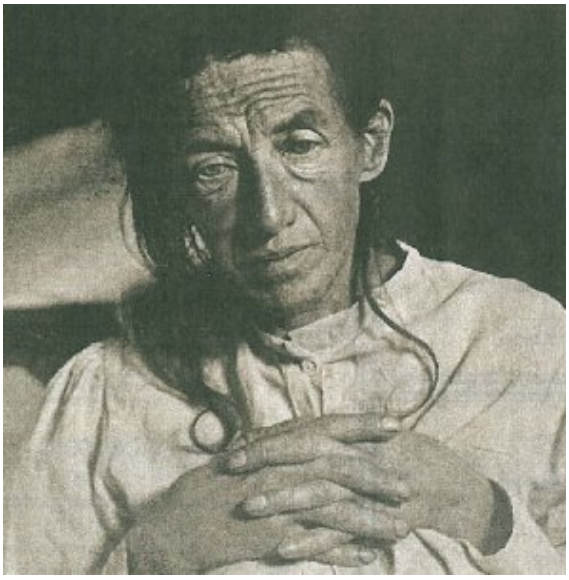
In addition to resolving signs and symptoms in multiple sclerosis patients, solving venous drainage problems in the brain, such as CCSVI, may similarly lead to a cure for other neurodegenerative diseaese as well, such as AD and PD. It may also be the answer to prevention of these conditions.

The surgical liberation procedure and upper cervical chiropractic brainstem and venous liberation correction may offer hope for a cure and prevention of AD.

History of AD,

According to western medical history books, a German doctor, Alois Alzheimer, discovered the condition in 1907 that would forever be tied to his family name. But he didn't exactly discover the condition. He just gave it a name.

Note: the picture below is supposedly of the First Alzheimer Patient. More accurately speaking, she was the first one to be recognized by western medical sciences.



If you study Traditional Chinese Medicine or Ayruvedic Medicine from India, you see that the condition actually goes back hundreds if not thousands of years. Alzheimer's contribution was that he identified the specific lesions of amyloid plaques and neurofibrillary tangles seen on autopsies of AD patients. He also proved the disease was organic. His chief rival of the day was Sigmund Freud who claimed the condition was psychological.

Pathology of AD

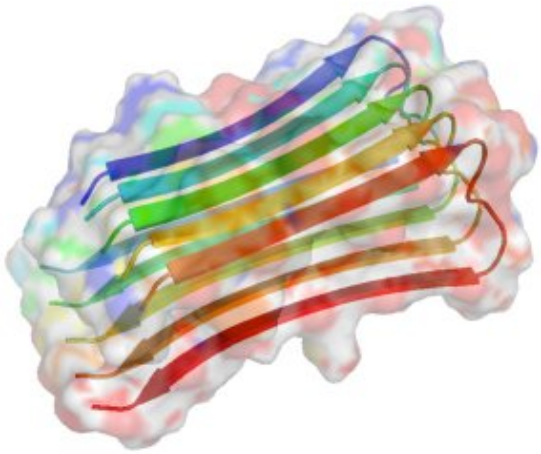
Alzheimer's disease is associated with some unusual pathology. The pathological findings include the neurofibrillary tangles and amyloid plaques mentioned above, as well as beta amyloidosis and amyloid precursor proteins, tau proteins and increased lipid levels in the brain.

Amyloid cells were so named because they were once thought to be composed of starches or fats. Instead, they turned out to be proteins that are normally shaped into strands of microtubules. Like all tubes, microtubules are perfect for structural strength as well as the conduction of chemicals.

NOTE: the picture below is an amyloid strand that has become bent and is starting to unravel.

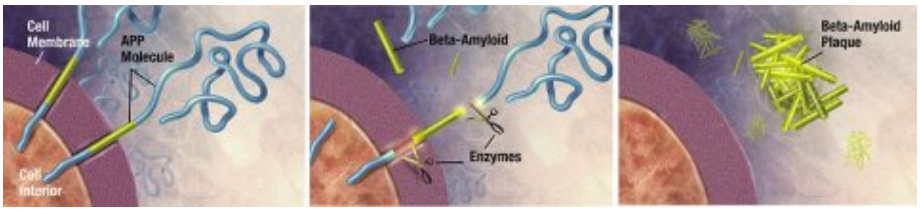
An abnormally high level of amyloids is called amyloidosis. Amyloidosis is associated with certain neurodegenerative diseases, such as AD. Beta amyloids are amyloids that have been changed from their normal tubular strand shapes into twisted distorted sheets. They come from amyloid precursor proteins that have been broken down by an enzyme called gamma secretase.

Note: the picture below is a amyloid strand that has become completely unraveled into a distorted beta amyloid sheet.

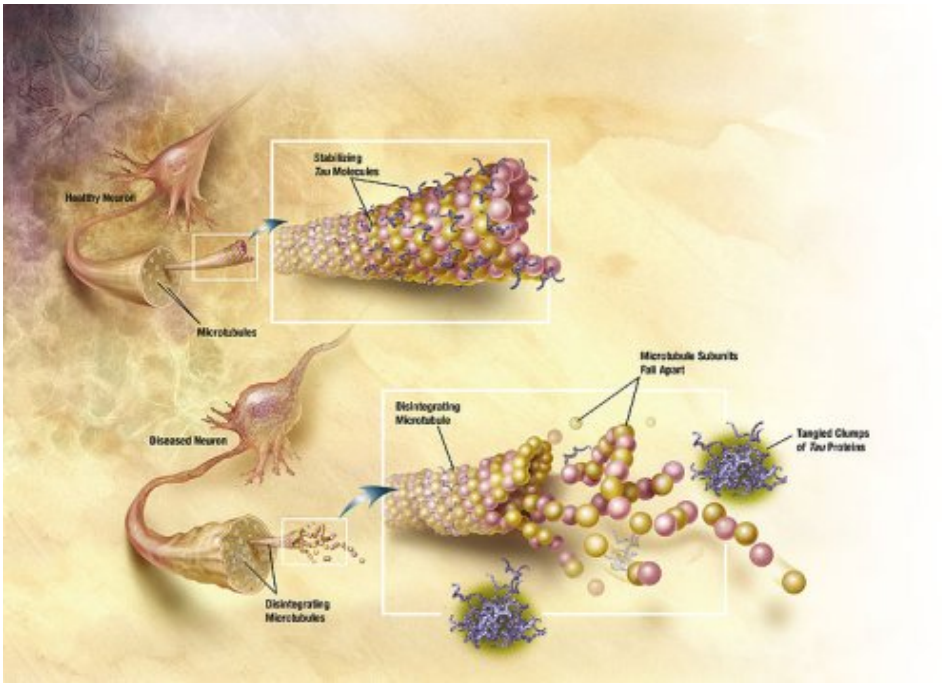


While amyloids are not directly the cause of the problem (for reasons unclear when nerve cells degenerate in AD, beta amyloids start to form into plaques and attach to the outside of nerve cells) amyloid plaques are one of the hallmarks of AD.

Note: the picture below shows the process by which the enzyme gamma secretase breaks down amyloid precursor proteins (APP) turning them into sheets of beta amyloid plaques that attach themselves to nerves.



In contrast to amyloid protein breakdown by gamma secretase into beta amyloids, the tau proteins seen in Alzheimer's disease break down by a process called phosphorylization. When the tau proteins break down they start to form into clumps called neurofibrillary tangles inside nerve cells. Neurofibrillary tangles, like the beta amyloid plaques are another hallmark of AD.



Interestingly, AD patients often have increased lipid levels in the brain. This is interesting because it is difficult for fats from the rest of the body to cross the blood brain barrier so there is no direct correlation between blood fat levels in the blood and the brain. This suggests that the fats are coming from within the brain. One of the most obvious possible sources is myelin.