

NORMAL AGING AND THE BRAIN: What are you going to do with what you're got?

A Presentation by Marti Bailey, Director of Sibley Senior Association and Community Health.

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Ms. Bailey opened the presentation with several questions: "What is normal aging?"; "What might impaired brain function look like?"; and "what can we do to care for ourselves or others?" She teased the audience first with rather depressing statistics—we were at the peak of our brain sharpness at age 20 (which everyone in the room passed a very long time ago) and that after age 85 the risk of dementia is close to 50%.

Normal Age Related Changes

Several normal characteristic of aging are worth noting. They include:

- Slower recall, which is perfectly normal. There is a lot more information to sort through to get to the answers we need such as the names associated with a familiar face.
- Changes in blood vessels that reduce blood flow.
- Impaired ability to multi-process. Multitasking is difficult in aging, and sound from certain kinds of music or the TV does inhibit focus and attention. It is better to try to do one thing at a time
- Reduced ability to inhibit irrelevant information and filter out superfluous information. The brain seems to be always working in the background
- Some reduced inhibitory control that reduces control over what comes out of your mouth.

Impaired Cognition- Symptoms to be concerned about:

- Memory issues that affect daily living.
- Asking the same questions over and over again.
- Forgetting recently learned things.
- Challenges in problem solving and planning. Look for what was and what is in terms of the abilities to do these tasks.
- Confusion about place and time.
- Familiar things taking longer to do.
- Losing your way to someplace familiar. Special issues can be a part of impaired cognition.
- New problems with words and speaking. Is it really a retrieval issue?
- Poor judgement.
- Withdrawal.
- Personality Changes.
- Spatial issues (frequent car bumps for example).
- Dementia effects the functions of daily living. A lot of diseases cause dementia and Alzheimer's.
- Often aphasia, apraxia and other symptoms of brain atrophy will be a part of a diagnosis.
- Often a problem with development of new memories is a classic symptom of Alzheimer's. Also referred to as assimilation of new memories.

Major Risk Factors for Dementia

- Age:
 - 60-64: 1-3% of the population will suffer with Alzheimer's and related diseases.
 - Percentage doubles every 5 years after 65
 - after 85, the risk is close to 50% for the Alzheimer's rate.
- Family History
 - Risk Factor Genes increase the risk of developing the disease.
 - One form of apolipoproteinE(APOE) in chromosome 19 increases a person's risks.
 - APOE4Genes - both early and late onset Alzheimer's have a genetic component.
- Other Risk Factors
 - Head injury
 - Overall poor health: Diabetes, High blood pressure, cholesterol.
 - Stress, a very important factor. It can create periodic impairment
 - Sensory handicap such as vision and hearing loss (NIH reports a 15% higher rate of Alzheimer's with hearing loss. Not sure if correcting it makes the memory problem any better.
 - Poor sleep

What is Possibly Protective?

- Baseline cognitive function evaluation.
- Doing things differently. Keep novelty in your life; continue education.
- Shake up your motor memory, do your routines differently, try eating with your non-dominant hand.
- Maintain overall health,
- Physical Activity: walking; yoga
- Build and keep strong support and social networks. Social isolation is very bad for your brain. Stay away from negative people. Choose a social life that includes positive people.
- Introverts: Go out and do things and then come home and re-charge. (Extroverts may already be charged by doing social things.)
- Good sleep hygiene is critical. Beware of snoring - have it investigated.
- Be safe, avoid head injuries.
- Meditation (pre-frontal cortex stimulation) is an evidence-based practice for improving your brain.

Concerned about your Memory or Cognitive Function? Here are some things to do:

- Make a list of the things that are bothering you such as
 - People complaining you are repeating yourself.
 - Struggling to do familiar things.
- Make an appointment with your primary care physician. Have a battery of tests to rule out other problems such as a vitamin deficiency, thyroid condition, etc.
- Take the Self-Administered Gerocognitive Exam (SAGE) (on line) to assess mild cognitive impairment and early dementia.
 - (<https://wexnermedical.osu.edu/brain-spine-neuro/memory-disorders/sage>)
- Get an early diagnosis.
- Get your paperwork in order.
- Get involved in research on early Alzheimer's and cognition. Advocate for more research