The Four Stages Of Dementia

The latest on monitoring, metrics, and modulation

October 28, 2025 By Mike Barr

TL;DR: Most people vastly underestimate how early — and how silently — dementia begins. Functional medicine specialist Mike Barr maps four discrete stages of cognitive decline, explains why “mild” cognitive impairment is anything but, and lays out a six-part lifestyle protocol (D-E-S-S-I-E) that can catch, slow, and in many cases reverse the process — well before a diagnosis lands.

- Stage 1 (Pre-Symptomatic): No symptoms yet, but detectable via p-tau 217 blood test or FDG-PET scan
- Stage 2 (Subjective Cognitive Impairment / SCI): You notice something’s off; others don’t. MoCA score still 26–30. Lasts ~10 years — and is readily reversible.
- Stage 3 (Mild Cognitive Impairment / MCI): Others now notice. MoCA drops to 19–25. 5–10% of people at this stage progress to full dementia each year.
- Stage 4 (Dementia): Much harder to reverse, but not impossible — and roughly 1 in 5 diagnoses at this stage are actually wrong.

[IMAGE: Brain scan or neuron illustration — something that conveys early detection and brain health]

First, Let’s Clear the Air on HIV

Having HIV — “fully” suppressed chronic HIV infection — does not increase one’s risk for neurocognitive decline in advanced age more than any other chronic viral infection. (Although an unnecessarily onerous medication burden certainly can.)

No one has arguably spent more time thinking about neurocognitive decline than Dr. Dale Bredesen (MD) — alumnus of Caltech, Duke, and UCSF, and currently based at the Buck Institute for Research on Aging.

The viruses on his radar — with documented links to the neuroinflammatory cascade that raises dementia risk — are: HSV-1, HHV6, SARS-CoV-2, and varicella-zoster virus (VZV). CMV and EBV are runners-up. Lyme and its co-infections — spirochetes, bacteria, and a parasite — rank high as well. HIV is not on the list.

(Here is a HAND-AD review for those wishing to push back.)

What We Call “Normal Aging” Usually Isn’t

What is commonly called “normal age-related memory loss” is nothing of the kind. Saying so is a bit like saying “normal age-related macular degeneration” or “normal age-related hypertension.” These things are common in old age, yes — but they are symptoms of underlying problems, not inevitable milestones of aging.

Add hearing loss, diminished vision, osteoporosis, and sarcopenia (unintended muscle loss) to the same list. They are all, for the most part, both avoidable and signs of underlying problems that can and should be treated — with lifestyle, not medications. The vast majority of this can be prevented. You just need someone to guide you.

Dementia Is Deceptive

It’s the Grim Reaper in a clown suit. We laugh off the “senior moments” and space-outs: “Don’t worry. There is nothing wrong. You’re overworked. You didn’t sleep well. You have a lot going on. It’s nothing, really.”

Sometimes that’s true; sometimes it isn’t. Stress and poor sleep do a number on cognitive function, and if you snap back once the extra burdens are lifted, you may well be fine. But the real tricky part about neurocognitive decline is that the person declining often doesn’t notice it themselves.

Dr. Bredesen used to tell a story about couples who came to see him. The upshot: “If someone comes in worried about new-onset forgetfulness, they are often okay. But if a spouse brings his or her partner in — with the partner insisting that ’everything is fine’ — it’s often not fine.”

And because Dr. Bredesen, myself, and pretty much everyone in his expanding network of collaborators have seen neurodegeneration reversed — over and over again, via cognitive tests, MRI, and physiological testing — it’s worth mapping the different stages of mental decline: how to recognize them, and most importantly, how to intervene.

The Four Stages of Cognitive Decline

Stage 1: Pre-Symptomatic

The biochemistry of degeneration has begun, but daily life is not yet affected. For years, specialists like Dr. Bredesen used special PET scans (FDG) or spinal fluid analysis to detect this. Now there is also a blood test — p-tau 217 — that can provide an early warning signal at this stage.

Stage 2: Subjective Cognitive Impairment (SCI)

You notice or suspect that something isn’t quite right — but no one else has caught on. (That self-awareness, it should be noted, is often absent in all but the most hypervigilant types.) You still score within the normal range on cognitive testing; on the widely used MoCA, you’d still land between 26 and 30.

The second stage of cognitive decline typically lasts about 10 years — and is readily reversible.

But you have to: (A) recognize it and (B) take action.

Stage 3: Mild Cognitive Impairment (MCI)

Now you are testing in the 19–25 range on the MoCA, and symptoms are observable to others. Forgetting names or faces, losing keys, walking into a room and blanking on why — but also subtler signs: changes in handwriting, diminished productivity, strange feedback from clients or coworkers, a dulled sense of taste or smell, or tiring quickly while reading.

On average, 5–10% of people with Stage 3 (MCI) will progress to full dementia each year.

So this “mild” cognitive impairment is anything but mild. MCI demands your full attention. If SCI slipped by unaddressed and you now find yourself here, it is time to get serious.

Stage 4: Dementia

With proper guidance and support, even people at this stage can stabilize and sometimes improve — but it is much, much more difficult. Please do not let yourself or someone you love reach this point before taking action.

And even here: there are far more misdiagnoses than most people realize.

As many as 1 in 5 “Alzheimer’s” diagnoses are wrong — totaling roughly 100,000 annual misdiagnoses in the U.S. and 2,000,000 worldwide.

Before accepting a dementia diagnosis, rule these out:

- Normal Pressure Hydrocephalus (NPH) — estimated to cause 10% of all “Alzheimer’s” cases (50,000 in the U.S. annually; 1 million worldwide). Classic triad: cognitive decline + bed-wetting + trouble walking. Now believed to be linked to gut microbiome imbalances.

- Low or low-normal B12 or vitamin D
- Deficiencies in B1, B2, and other B vitamins; magnesium, zinc, selenium, and iodine
- Toxic exposures: pesticides/herbicides, lead, mercury, manganese, molybdenum (from knee replacements)
- Medication side effects — especially statins, and particularly high-dose Lipitor (40–80 mg)
- Chronic constipation
- Gum disease
- Hormone insufficiency
- Inadequate nutrition
- Alcohol abuse
- Insulin resistance
- Sleep apnea

See the August 2013 NPR story: "Little-Known Illness Mimics Dementia"

[IMAGE: Graphic showing the DESSIE framework — clean, scannable visual of the six lifestyle pillars]

How to Intervene: The D-E-S-S-I-E Framework

Dr. Bredesen's team uses the mnemonic D-E-S-S. I have taken the liberty of adding I-E to make it D-E-S-S-I-E. Think, loosely, of an "I Love Lucy" co-star — or a city in Ethiopia.

- D — Diet: Essentially plant-based, ketogenic, and time-restricted. Dr. Bredesen's protocol is called "Ketoflex 12/3." Grain-free, sugar-free, mostly alcohol-free.
- E — Exercise: Strength training plus cardio, four times weekly. Add stretching.
- S — Sleep: 7–8 hours nightly, with sufficient deep sleep (60 minutes), REM (90 minutes), and oxygen saturation above 94%.
- S — Stress Management: This one can be personalized. What matters is that you have a consistent practice.
- I — Infections: Rule out and treat chronic infections — all the herpes-family viruses, Lyme and co-infections, mouth and sinus pathogens, SIBO, SIFO, and other GI microbial overgrowths.
- E — Exposures: Rule out or reduce elevated heavy metals, pesticides and herbicides, and

mycotoxins (especially if you carry a susceptible HLA genotype).

Beyond the DESSIE pillars, also optimize: vitamin B12, vitamin D, glutathione, other antioxidants, B vitamins, hormones, essential fatty acids, and protein intake (which requires adequate stomach acid and functioning intestinal brush border).

Blood Tests Worth Knowing

In addition to the p-tau 217, Dr. Bredesen recommends monitoring the following markers for early signs of neurodegeneration:

- GFAP (glial fibrillary acidic protein): early marker of brain inflammation
- Nfl (neurofilament light chain): marker of neuronal damage
- Beta amyloid 42:40 ratio: marker for brain amyloid — now understood to be an antimicrobial peptide
- Syn-One (skin biopsy): marker for Parkinson's and Lewy Body Dementia

P-tau 217 costs as little as $200; GFAP and Nfl run closer to $300. GFAP and Nfl are available to self-pay patients via Rupa Health — though New York and New Jersey residents may face restrictions on which draw sites they can use. I will update this post if p-tau 217 becomes available there as well.

One final note for HIV-positive readers: the literature does suggest a roughly twofold increase in Parkinson's risk for people living with HIV. A dedicated post on that research — and what to do about it — is coming.

I hope this is useful. As always, feel free to reach out.

Mike Barr, a longtime POZ Contributing Editor and founding member of the Treatment Action Group (TAG), is a science writer, functional medicine practitioner and herbalist in NYC. Reach out to him here. Or sign up for his curated professional-grade supplement dispensary — 30% off your first order, 25% off all auto-refills — here.

Sources & Further Reading:

- The End of Alzheimer's Program — Dr. Dale Bredesen (2017)
- Park Avenue Holistic: Cognitive Health
- Root Resolution Health: Labs for Assessing Cognitive Risk
- NPR: "Little-Known Illness Mimics Dementia" (Aug. 2013)
- HAND-AD Review (HIV-Associated Neurocognitive Decline)

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