Keywords used: midlife hypertension and dementia

Problem: We have known there is a connection between hypertension and dementia. Though the link between late-life hypertension and dementia is unclear, midlife hypertension causes cognitive decline. Hypertension and dementia rates annually increase, forcing physicians to consider cost-effective solutions to slow the trend.

Purpose: A new meta-analysis shows that certain antihypertensives are more effective than others at decreasing dementia risks. This article aims to expose the evidence, helping physicians with prescribing decisions.

Midlife Hypertension and Dementia: Why Prescribing Matters

Travel, family and fun — words that should describe the retirement years. However, health concerns often prevent these dreams from becoming reality. With dementia and cardiovascular disease growing at staggering rates in the United States, the later years of life are often characterized by brain fog and inactivity.

Research indicates that midlife hypertension and dementia are linked. Antihypertensives help improve heart health. But could they also be a cost-effective strategy for decreasing dementia rates? If so, when is treatment the most effective? Are certain antihypertensive medications better at delaying dementia onset than others? Keep reading to learn about research that could help you with prescribing decisions.

Key Takeaways

- Hypertension is the chief modifiable risk factor associated with dementia. Further, midlife hypertension is associated with a 60% increased risk for all-cause dementia.
- We have long understood that there is a connection between hypertension and dementia. However, recent research indicates that early treatment with specific antihypertensives could reduce patients' risk of developing dementia.
- Intensive blood pressure management beginning during midlife produces the most consequential long-term advantages.
- In a recent study, calcium channel blockers and angiotensin II receptor blockers were the most effective antihypertensives for delaying dementia.
- By optimizing blood pressure drugs early, healthcare professionals may be able to develop a cost-effective, scalable strategy to reduce worldwide dementia rates.

Hypertension and dementia in the United States

Many people assume dementia is a natural part of aging. This assumption is false. Dementia is a group of symptoms caused by modifiable and non-modifiable factors. Some modifiable metabolic and vascular contributors to dementia are the following:

- Hypertension
- Diabetes
- Hypercholesterolemia
- Smoking
- Excess alcohol use
- Sedentary lifestyle
- Obesity

Hypertension is the most prevalent risk factor associated with dementia. This reality makes blood pressure management vital. The Centers for Disease Control and Prevention (CDC) estimates that half of American adults have hypertension. Yet, only 1 in 4 of those individuals effectively manage their condition.

We have known there is a connection between hypertension and dementia. With hypertension and dementia rates rising annually, many wonder if there is a cost-effective solution to help change the trend.

Antihypertensives reduce strain on the heart and vascular system, improving cardiovascular health. Many physicians believe that **antihypertensives could also enhance neurological health and reduce insults to the brain.** With adequate patient education and buy-in, these inexpensive interventions may help lower global dementia rates.

Late-life vs midlife hypertension

Midlife hypertension is linked to a 60% increased risk for all-cause dementia. Additionally, hypertensive individuals in their 40s and 50s have a 25% higher likelihood of developing Alzheimer's-caused dementia.

However, the link between elevated blood pressure and dementia is not consistent for individuals older than 60. Research shows a U-shaped relationship between dementia risk and blood pressure. In some cases, elevated BP was associated with increased cognition. In other situations, high BP was linked to decreased cognition. The conflicting results have researchers wondering,**“Could midlife hypertension with late-life hypotension negatively impact cognition?”.**

Underlying factors limit our understanding, and this concept needs further exploration. But, many physicians more readily prescribe BP medications to patients in their 40s. These prescribing practices aim to promote cardiovascular *and* neurological health. Though

researchers cannot answer all the questions related to late-life hypertension and dementia, they have made exciting discoveries related to other clinical practice questions.

Evidence-based interventions

No curative pharmaceutical is currently available for dementia treatment. However, research indicates that one of the most critical factors to address is midlife hypertension.

Intensive midlife blood pressure management

When some patients hear they need BP medication, they immediately make lifestyle changes. The news from the doctor is the push they needed to address poor lifestyle habits. Conversely, many people struggle or refuse to make the most minor changes. These varying responses make it difficult to know when to prescribe antihypertensives.

Research discoveries may help physicians with prescribing decisions. Studies indicate that regardless of the method, addressing hypertension is imperative. It enhances cardiovascular health and reduces patients' risks of cognitive decline. **Intensive blood pressure control beginning in the 40s and 50s produces the most significant long-term advantages.**

Antihypertensives are inexpensive. By optimizing blood pressure medication early, healthcare professionals may be able to create a cost-effective, scalable strategy to reduce dementia rates globally.

Antihypertensive medications that reduce dementia

Physicians are always trying to maximize their efforts. They often question whether a medication will heal without causing harm in another area. Better yet, can one medicine treat multiple conditions?

Research indicates that **specific BP medications work better at delaying dementia than others.** But which medications are most effective at achieving this objective?

A network meta-analysis published in The Journal of Post-Acute and Long-Term Care Medicine (JAMDA) showed exciting results. Calcium channel blockers (CCBs) and angiotensin II receptor blockers (ARBs) reduce dementia risk by 12%-17% more than beta blockers and angiotensin-converting enzyme inhibitors (ACE inhibitors). Utilizing CCBs or ARBS for treating midlife hypertension may decrease late-life dementia.

These findings could have significant implications for blood pressure management guidelines. Adjusting antihypertensive protocol may be an inexpensive, scalable strategy to reduce cognitive decline.

Promoting heart health and cognition with evidence-based interventions

Retirement is a time for travel, family and personal fulfillment. Your patients want to be able to participate in the simple pleasures of life. They certainly want to avoid spending their later years in brain fog. We are here to support your patients by optimizing heart health and cognition.

<Facility Name> utilizes evidence-based interventions to help improve patient outcomes. We are passionate about providing holistic cardiology services in your community.

Are you looking for cardiology resources that see the big picture? We would be honored to partner with you to promote heart health. Click the "Refer" button to get started.

Resources

“Use of Antihypertensives, Blood Pressure, and Estimated Risk of Dementia in Late Life: An Individual Participant Data Meta-Analysis.” JAMA Network, 2023, Use of Antihypertensives, Blood Pressure, and Estimated Risk of Dementia in Late Life: An Individual Participant Data Meta-Analysis | JAMA.

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