Incident Herpes Zoster and Risk of Dementia

There is limited evidence suggesting that herpes zoster (HZ), caused by the reactivation of the varicella-zoster virus, contributes to dementia through neuroinflammation, neural damage, and cerebral vasculopathy.

Do patients with HZ have an increased risk of developing dementia?

Danish population-based matched cohort study to determine the association between HZ and dementia in

- Patients with HZ aged ≥ 40 years (n = 247,305)
- Comparison cohort from the general population (n = 1,235,890)

Risk of all-cause dementia

Hazard ratio (HR) in patients with HZ vs matched controls

- During first year of follow-up: 0.98 (0.92–1.04)
- During years 1–21 of follow-up: 0.93 (0.90–0.95)

Diagnosis of dementia based on inverse probability-weighted cumulative incidence values

- 9.7% Patients with HZ
- 10.3% Matched controls

Long-term risk of dementia

- After 1-year follow-up
  - Population with central nervous system infections: Increased risk HR = 1.94 (0.78–4.80)
  - Other subpopulations: None/slightly decreased risk

Patients with HZ are not at an increased risk of developing dementia

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