

Beyond age: is it never too late for VNS?

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Background

Vagus nerve stimulation (VNS) is a well-established adjunctive therapy for drug-resistant epilepsy (DRE), demonstrating efficacy and favorable safety profile into broad patients' populations. However, data specifically addressing the outcomes of VNS implantation in elderly patients (aged over 60 years) are relatively scarce. Elderly subjects present unique challenges, including various comorbidities and distinct pharmacokinetic considerations, warranting focused investigation. This study aims at describing our Center experience with VNS therapy in older adults with epilepsy, evaluating its safety and efficacy, and underlying its potential impact on cognitive functions.

Cases description

Hypoxic encephalopathy

Two years later:
Reduction in frequency of seizures,
seizure-free periods up to 10 days
Current intensity: 1.50 mA

Right hippocampal
sclerosis

VNS implant at 62 years old
ASMs: CBZ+LCS+PER+PB
AEs: Transient hypophonia

Six years later:
Reduction in frequency and
intensity of seizures, no more
"drop attacks" reported
Current intensity: 1.50mA

Cortical developmental
malformation

VNS implant at 65 years old
ASMs: CBZ+LCS+CLB+PER+BRV
No AEs reported.

Ten years later:
Reduction in seizures (including
drop attacks) >50%.
Current intensity: 1.75 mA

VNS implant at 58 years old
ASMs: CBZ+LCS+BRV
No AEs reported.

Conclusions

Our experience suggests that VNS represents a valid treatment option for DRE in elderly patients, offering safety profile and efficacy comparable to those reported in younger populations. Furthermore, VNS enhances cognitive function; the improvement in cognitive and social capabilities can significantly impact the quality of life of these patients and their caregivers.

Bibliografia: Toffa et al. 2020; Wang et al. 2024; Pérez-Carbonell et al. 2019.



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