Quality of Life in Neuromyelitis Optica: A Systematic Review

INTRODUCTION
- Neuromyelitis Optica (NMO; also known as Devic’s disease) is a rare autoimmune condition characterized by:
  - Acute relapsing optic neuritis
  - Extensive transverse myelitis
- Historically, NMO was viewed as a subtype of Multiple Sclerosis (MS). However, anti-Aquaporin 4 antibody (against aquaporin-4 antigen) is specific, and present in approximately 75% of people with NMO.
- Many multiple sclerosis (MS) treatments (such as beta-interferon) may actually increase relapse rates in NMO.

NMO is associated with significant reduction in quality of life (QoL): NMO is a relapsing condition; every relapse causes further disability, requiring a period of rehabilitation.

Objective: To evaluate the QoL in patients with NMO by conducting a systematic review of published peer-reviewed studies.

METHODS
- Literature search performed in MedLINE and EMBASE.
- Studies that included patients with NMO and reported use of validated QoL instrument were included.
- Key Words:
  - Quality of Life
  - Neuromyelitis Optica
  - Devic's
- Population: Patients with Neuromyelitis Optica
- Outcome: Pain, level of QoL
- Language of studies: English only
- Time of publication: All studies published before November 2014
- Study design: Observational studies

RESULTS
- Two independent authors screened the titles and abstracts and extract the data in standardized format of the studies included. All disagreements were resolved through discussion.

DISCUSSION
Summary of major differences between NMO and MS:
- Depression was found in NMO patients: mild (13.9%); moderate (5.6%); severe (11.1%);
- Psychological dimension of fatigue, was better in NMO
- Pain was far more common in subjects with NMO (86.2% vs 40.9%; P<0.001).
- Pain was constant in 68% affecting most Activities of Daily Living
- Neuropathic pain was identified in 62% patients.

In a study reported in 2012:
- Pain affects patients with NMO more frequently and severely
- Frequency of current pain: NMO vs MS: 86.2% vs 40.9%. (p<0.001)
- Severity (10-point scale): NMO vs MS: 5.38 vs 1.85 (p<0.001)

This resulted in higher amount of prescription medication requirement (NMO vs MS: 75.9% vs 37.8%; p<0.001)

CONCLUSIONS
- NMO patients are associated with higher levels of pain and lower QoL scores than MS patients
- Further research is required.

REFERENCES

Full-text articles assessed for eligibility (n=21) and includes, including two linked papers.

Quality of life

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