

Progressive Supranuclear Palsy Treatment- A Systematic Review

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Introduction

Progressive Supranuclear Palsy (PSP) is an uncommon neurodegenerative disease associated with postural instability, falling, and memory loss. Because of clinical similarities, it is often classified as atypical Parkinson's disease. PSP may present abruptly with a relatively rapid decline, leading to death in a few years. Different therapeutic approaches have been suggested for PSP, but their efficacy is unclear. To our knowledge, there has been no systematic review of PSP treatment.

Objective

To determine the effectiveness PSP treatments.

Methods

- Literature sources: PubMed, SCOPUS and "gray" literature.
- Initial inclusion criteria:
 1. English.
 2. Published between January 1, 1994 to January 2015.
 3. Published data on a treatment intervention for PSP patients.
- Exclusion criteria:
 1. No comparison group.
 2. No clear, defined interventions.
 3. Outcome(s) that were not objective (we allowed opinion/observations recorded by the patient or a family member).
 4. Outcome assessors not blinded to the intervention.
 5. The control population needed to have an intervention similar to the experimental intervention (an attention sham).

Results

The initial search obtained 617 publications. Of these, 28 met our inclusion criteria. These were grouped by therapy:

2 dealt with an ophthalmic interventions



3 with a PT/rehabilitation intervention



4 with some intracranial procedures



17 dealt with medications



2 dealt with 2 or more types of intervention.

While a number of articles had suggestive findings, we found only 9 acceptable articles. They either showed the subject therapy was not efficacious, or the effects were not clearly beneficial to the patient. A meta-analysis was not possible.

Authors' conclusions

No therapy has been established as efficacious for PSP. Studies of one medication, Co-Q 10, have been encouraging in phase 2 study, and a phase 3 study is currently active. An approach using physical therapy (balance training) and eye movement rehabilitation found some benefit in gait and general mobility, but there was no adequate control and the overall benefit to patients (falls, quality of life, hospitalization, etc.) was not evaluated.