Monthly oral methylprednisolone pulse treatment in progressive multiple sclerosis - DTU Orbit (13/01/2019)

Objective: To evaluate the effect of monthly oral methylprednisolone pulse treatment on intrathecal inflammation in progressive MS.

Methods: In this open-label phase 2A study, 15 primary progressive and 15 secondary progressive MS patients received oral methylprednisolone pulse treatment for 60 weeks. Primary outcome was changes in CSF concentrations of osteopontin. Secondary outcomes were other CSF biomarkers of inflammation, axonal damage and demyelination; clinical scores; magnetic resonance imaging measures of disease activity, magnetization transfer ratio (MTR) and diffusion tensor imaging (DTI); motor evoked potentials; and bone density scans.

Results: We found no change in the CSF concentration of osteopontin, but we observed significant improvement in clinical scores, MTR, DTI and some secondary CSF outcome measures. Adverse events were well-known side effects to methylprednisolone.

Conclusion: Monthly methylprednisolone pulse treatment was safe, but had no effect on the primary outcome. However, improvements in secondary clinical and MRI outcome measures suggest that this treatment regimen may have a beneficial effect in progressive MS.

General information
- State: E-pub ahead of print
- Organisations: Copenhagen University Hospital
- Pages: 1-9
- Publication date: 2015
- Peer-reviewed: Yes

Publication information
- Journal: Multiple Sclerosis
- ISSN (Print): 1352-4585
- Ratings:
  - BFI (2019): BFI-level 1
  - Web of Science (2019): Indexed yes
  - BFI (2018): BFI-level 1
  - Web of Science (2018): Indexed yes
  - BFI (2017): BFI-level 1
  - Scopus rating (2017): CiteScore 3.01 SJR 1.668 SNIP 1.12
  - Web of Science (2017): Impact factor 5.28
  - Web of Science (2017): Indexed yes
  - BFI (2016): BFI-level 1
  - Scopus rating (2016): CiteScore 3.04 SJR 2.076 SNIP 1.252
  - Web of Science (2016): Impact factor 4.84
  - BFI (2015): BFI-level 1
  - Scopus rating (2015): CiteScore 3.61 SJR 2.305 SNIP 1.531
  - Web of Science (2015): Indexed yes
  - BFI (2014): BFI-level 1
  - Scopus rating (2014): CiteScore 3.96 SJR 2.2 SNIP 1.513
  - Web of Science (2014): Impact factor 4.822
  - BFI (2013): BFI-level 1
  - Scopus rating (2013): CiteScore 3.95 SJR 1.888 SNIP 1.487
  - Web of Science (2013): Impact factor 4.863
  - ISI indexed (2013): ISI indexed yes
  - Web of Science (2013): Indexed yes