

IMMUNOTHERAPY OF NEUROLOGICAL PARANEOPLASTIC SYNDROMES - DISAPPOINTING OR EFFECTIVE - WHAT WE MAY LEARN FROM AVAILABLE REPORTS?

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Paraneoplastic neurological syndromes (PNS) are remote effects of cancer. PNS, even if of high clinical importance, are rare or under-diagnosed, limiting the possibilities to undertake larger studies. We examined multiple studies in an attempt to determine the relationship between immunotherapy and outcome of PNS. Material & methods: The studies were located via a search of MEDLINE databases. Clinical manifestation, onconeural antibodies, immunotherapy, PNS outcome and death were considered. We have identified 28 studies (162 patients). The best model was fit on the basis of maximum likelihood Chi-square statistics. For statistically significant models we have then explored contingency tables of relationship between variables studied. Efficacy outcome was defined as "no improvement", "stable", "partial", "improvement" of PNS. Results. We have found classical PNS associated with "no improvement" (36,4%)($p < 0.05$). Classical syndromes were more frequent in male patients (67,6%, $p < 0.05$), who on outcome analysis presented "no improvement". The avoidance of immunosuppressive (IS) treatment led to "no improvement" (31,2%), however marked ($p < 0.05$) number of patients (22,1%) manifested "improvement" (14,3%) or "stabilization" (14,3%), as well. Intravenous immunoglobulins (IVG) administration was associated with "improvement" ($p < 0.05$), plasmapheresis and steroids having no effect on the efficacy outcome of PNS. Statistically highly significant association of IS avoidance with death (45%, $p < 0,0001$) was found, what was also the case for IVG (43,3%). Plasmapheresis and IS had no effect on mortality in PNS patients. Conclusion. Reports analysed indicate beneficial effect of IVG on the outcome of PNS. Plasmapheresis and steroids had no effect, while immunosuppression may have clinical effect in some patients.