P378 - Employment outcomes in paediatric onset MS

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Introduction: Paediatric onset MS, defined by first symptom before the age of 18, often comes with high levels of disease activity. Life-threatening disease courses and so called break through MS are more common than in adult onset MS. Often relapses remit completely, whereas neuropsychological deficits are more relevant compared to young adults.

Aim: This study aims to provide quantitative and qualitative analysis on long-term employment outcomes for paediatric onset MS in Germany.

Methods: Data [export data: 06.02.2019] on 21,124 PwMS from the German MS-Register was analysed. All patients were included after their 18th birthday. 929 (4,4%) had childhood onset. Descriptive analyses were performed using R and group comparisons were done using Chi²-Tests, considering p-values< 0.001 statistically significant.

Results: Mean age of onset (MA) within the paediatric onset group (pOMS), was 15.21 (± 2.39) compared to 33,7 (± 10.2) years within the adult onset group (aOMS). The mean disease duration (DD) for pOMS was 20,2 (± 12.74) years, the median EDSS 2,5. For aOMS mean DD was 13,2 (± 9.74) years and median EDSS 2,5. With 2.8%** compared to 0.93% pOMS did significantly more often not finish any school at all compared to aOMS. Furthermore 14.9%** of pOMS (compared to 5.64% in aOMS) did not finish any job training or university at all.

Conclusions: Our analysis showed that patients with paediatric onset MS are significantly more often not able to finish a school degree nor any job or university training. While their EDSS does not show major impairment (below or equal 3.0) for most of them even after 20-25 years DD (47%), thus implying good coping mechanisms in regard to the MS, their onset symptoms are more likely to be neuropsychological which is reflected in the reduced numbers of finished school and job trainings. This may be due to the fact that MS afflicted a developing brain. Effective therapy at onset might be helpful to prevent these consequences.

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