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Correlation between falls and near falls in people with moderate to advanced multiple sclerosis.

Background

It is well known that people with multiple sclerosis (MS) often have impaired balance and fall frequently. A previous study reported a proportion of fallers at 63% during 3 months, 2352 near fall incidents and 270 falls with a correlation between falls and near falls at $r=0.57$ in a sample with mild to moderate MS. This implies that many near fall incidents were managed successfully and did not result in a fall. The correlation between falls and near falls in those with more advanced MS is not known. The aim was therefore to analyse this correlation in people with moderate to advanced MS.

Methods

24 people (EDSS-score 4.0 – 7.0) reported falls and near falls on a daily basis by using a diary during a 7 week period. Reminders were given weekly using text-messages.

Definitions: Fall: “an unexpected contact with the any part of the body on the ground”; Near fall: “an occasion on which an individual felt that they were about to fall but did not actually fall”. Spearman’s rho was used for analysis.

Results

A higher proportion (18 out of 24; 75%) reported falls in this sample (EDSS 4.0 – 7.0) compared to a previous study (63%) (EDSS 3.5 – 6.0) despite the shorter study period. In total, 91 falls and 502 near falls were reported during 7 weeks. The correlation between falls and near falls was similar to that reported for people with milder to moderate MS ($r=0.58$).

Conclusion

Three out of four people with moderate to advanced MS fell within a 7 week period. Previously reported moderate to strong correlation between falls and near falls is valid also in people with moderate to advanced MS (EDSS 4.0-7.0).

Reference