Study design

- Patients with MS were matched 1:1 to patients without MS from January 1, 2011 to September 30, 2015.
- The prevalence of common comorbidities in MS was assessed, and matched datasets were compared with those without MS across all age groups and by sex.
- The comorbidities listed could include a mixture of conditions directly caused by MS (e.g. dementia, hemiplegia/hemiparesis, depression), complications (e.g. microvascular disease induced by chronic hypertension, peripheral vascular disease), or remote conditions (e.g. obesity, diabetes with comorbidities and complications, peripheral vascular disease).

Results

Sample selection

- Patients with MS and those without MS were matched 1:1 to patients without MS from January 1, 2011 to September 30, 2015.

Baseline characteristics

- Patients with MS and those without MS were matched 1:1 to patients without MS from January 1, 2011 to September 30, 2015.

Comorbidities by age and sex subgroups

- The prevalence of diabetes did not statistically significantly differ in males and females across any of the age groups (p=0.13).

Cerebrovascular disease

- Patients with MS and those without MS had diagnoses of hypertension, hyperlipidemia, and diabetes with comorbidities and complications at a significantly higher rate compared with those without MS aged 35–44 (p=0.0061) compared with patients without MS aged 45–54 and 55–65 (p=0.05; p=0.05).

Neurological disease

- The prevalence of any prior malignancy, cerebrovascular disease, chronic lung disease, chronic pulmonary disease, renal disease, and peptic ulcer disease was statistically significantly higher in patients with MS compared with those without MS (p<0.05).

LIMITATIONS

- The comorbidities in matched patients with and without MS are summarized in Table 2.

CONCLUSIONS

- This study used a large US claims database to compare comorbidities in patients with and without MS.

REFERENCES

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1 Providence Multiple Sclerosis Center, Portland, OR, USA; 2 Health Services Consulting Corporation, Boxborough, MA, USA; 3 EMD Serono, Inc., Rockland, MA, USA.