

Is falling really a problem for people living with ankylosing spondylitis? A survey of National Ankylosing Spondylitis Society members

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Background

A significant portion of ankylosing spondylitis (AS) patients develop chronic progressive disease and disability due to spinal inflammation leading to fusion, often with thoracic kyphosis. This development can interfere with static postural stability, mobility, flexibility, gait and musculoskeletal strength, potentially increasing the risk of falling. In the UK, there is currently paucity of knowledge of the extent, frequency and implications of falling for this population. Our aim was to examine whether falling and fear of falling was a problem in AS patients in the UK, while exploring possible contributory factors.

Methods

During the month of August 2016, the National Ankylosing Spondylitis Society (NASS) conducted an anonymous on line poll of its members. The survey included demographic details, knowledge of diagnosis of osteoporosis, walking aide use, confidence in turning, frequency of, reasons for and consequences of falling.

Results

In total 178 members of NASS completed the survey (60% female, 40% male, age range 19 to 84 years). 42% were diagnosed with AS less than 5 years ago, 16% between 5 and 10 years ago, 16% between 10 to 20 years ago and 26% more than 20 years ago. 52% did not have osteoporosis, 36% were unsure, 6% had osteopenia and 6% osteoporosis. 44% used various walking aides with varying frequency of use from 24% constantly, 17% most of the time, 33% some of the time and 26% infrequently. 12% of respondents rated their ability to look straight ahead as poor and 54% had difficulty turning their head and body. A large percentage (72%) felt safe while turning while 24% felt they were unsafe. Importantly, 55% had experienced at least one fall since their diagnosis with 65 (37%) people falling between 1 to 5 times, 19 (11%) falling between 5 to 10 times and 13 (7%) more than 10 times. The main reasons given for falling included poor balance (38%), AS pain and stiffness (19%), weakness (16%), tripping (10%), slippery floor (10%), poor proprioception (4%) and alcohol (3%). Of the 96 people who had fallen, 28 people (28%) had attended hospital with 21 (21%) experiencing fractures with 6 people requiring surgery.

Conclusion

As one in two AS patients have fallen at least once since their diagnosis, it appears that falling in AS patients warrants further research, due to the potentially devastating consequences of falling. The contributory factors, such as balance, AS symptomology (especially pain and weakness) and functional ability must be quantified to enable better understanding of the risk in this population. This would allow for further research in predicting who may be most at risk of falling and stratify appropriate clinical interventions to reduce this risk.