A cross-sectional study of bone health in multiple sclerosis.

BACKGROUND: Osteoporosis is an important risk factor for fragility fractures. Although osteoporosis is considered common in multiple sclerosis (MS), few previous studies focused on fractures in MS.

OBJECTIVE: Using the North American Research Committee on Multiple Sclerosis (NARCOMS) Registry, we investigated the frequency of osteoporosis, fractures, and clinical risk factors for fracture in MS.

METHODS: In 2007, 9,346 NARCOMS participants reported fractures and clinical risk factors for fractures including history of osteoporosis or osteopenia (low bone mass), sedentary level of physical activity, falls in the last year, current smoking status, family history of osteoporosis, and impaired mobility.

RESULTS: Among responders, 2,501 (27.2%) reported low bone mass. More than 15% of responders reported a history of fracture after age 13 years (n = 1,482). Among those reporting fractures, 685 (46.2%) reported multiple fractures, while 522 (35.2%) reported a wrist fracture, 165 (11.1%) reported a vertebral fracture, and 100 (7.4%) reported a hip fracture. Excluding age, 1,413 (15.1%) participants had 1 clinical risk factor for fracture, 2,341 (25.0%) had 2, and 5,393 (57.7%) had 3 or more. Among participants with a history of fracture, 746 (55%) reported taking calcium supplements, 858 (68.8%) reported taking vitamin D supplements or a multivitamin with vitamin D, and 334 (22.5%) reported taking a bisphosphonate.
CONCLUSION: Patients with multiple sclerosis (MS) often have multiple risk factors for osteoporotic fractures. Many patients with MS with low bone mass or previous fractures are not taking supplemental calcium or vitamin D, suggesting a potential area of improvement in care.

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