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Association of disabling foot pain with foot disorders among community-dwelling older adults

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Background: Foot pain is a common and severe problem among community-dwelling older adults. Disabling foot pain is associated with decreased ability to perform activities of daily living (Black et al., 1987; Bowling et al., 1997), problems with balance and gait (Gorter et al., 2000; Menz et al., 2001; Menz et al., 2005) and increased risk of fall (Leveille et al., 2002; Menz et al., 2006). However, there are few studies about estimates of the population prevalence on disabling foot pain, and the relationship with foot disorders and functional fitness among Japanese older adults.

Purpose: The purpose of the present study is (i) to determine population prevalence of disabling foot pain, and (ii) to examine the association of disabling foot pain with foot disorders and functional fitness among community-dwelling older Japanese.

Methods: The study design is a longitudinal study (baseline and 3-year follow-up). Baseline assessment consisted of a two-stage process involving an initial postal questionnaire and a subsequent health

check-up. A total of 3,000 residents aged over 65 years and living in metropolitan area (Matsudo city) were randomly selected from the residential registries of the city to request the cooperation in the present study. Disabling foot pain was measured using Japanese version of the Manchester Foot Pain and Disability Index (MFPDI; Garrow et al., 2000). The MFPDI is a 19-item self-administered questionnaire that assesses foot pain-related problems across four constructs: pain, function, appearance, and work and leisure. Foot disorders and foot symptoms were assessed using the validated Foot Assessment Clinical Tool to capture the main features of common clinical foot disorders. In addition, functional fitness parameters were selected lower and upper body strength, agility/dynamic balance, and were measured by the following tests: chair stand repetitions, functional reach test, timed up-and-go test, 5-m walk test, hand grip test. Baseline data by postal survey was collected. At present, we are gathering data on foot disorders and functional fitness by health check-up.