J Orthop Sci (2008) 13:1-2 DOI 10.1007/s00776-007-1202-6 ORTHOPAEDIC SCIENCE © The Japanese Orthopaedic Association

Editorial

A "super-aged" society and the "locomotive syndrome"

Kozo Nakamura

President, The Japanese Orthopaedic Association; Orthopaedic Surgery, Sensory and Motor System Medicine, Surgical Sciences, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan

The population of Japan is aging very rapidly. According to an estimate made by the Ministry of Internal Affairs and Communications on Keiro no Hi (Respect for the Aged Day, a national holiday, the third Monday of September), people aged 65 and over numbered 27 440 000 in 2007, which is 22% of the population. Both figures set new records. Those aged 80 and above numbered 7130000, exceeding 7000000 for the first time. Because a society is considered relatively old when over 8%-10% of its population is 65 or older, Japan can already be seen as a "super-aged" society.

An aging population inevitably has a great impact on social systems, including public health. To cope with Japan's rapid change in age demographics, a new insurance system, Kaigo Hoken (Nursing Care Insurance), was introduced in 2000. The number of elderly who need nursing care is increasing; 4300000 individuals actually received such services in 2006, and this increase in demand for nursing care poses a great challenge for the system. The reasons for which services were needed were stroke (25.7%), senility (16.3%), falls/fractures (10.8%), dementia (10.7%), joint disorders (10.6%), and others. Orthopedic problems are unquestionably one of the main reasons for nursing care, and this fact should be more widely recognized by society.

In 1994, the Japanese Orthopaedic Association (JOA) decided to designate October 8th as Hone to Kansetsu no Hi (Bone and Joint Day) in order to publicize to the general public the importance of locomotive organs. Since then, the JOA has devoted various educational efforts to increasing public awareness of the importance of each individual's locomotive organs through the Hone to Kansetsu no Hi movement, such as open lectures for citizens offered in many locations throughout the year, "call-in" programs in October of each year to

answer questions from orthopedic patients, a lecture delivered through the mass media once a year, and distribution of informative brochures to the public.

In 2000, the Bone and Joint Decade (BJD) was launched at the headquarters of the World Health Organization in Geneva. The goal of the BJD is to improve the health-related quality of life of people with musculoskeletal disorders throughout the world, and to raise awareness of the suffering and cost to society associated with joint diseases, osteoporosis, spinal disorders and other related conditions. In response to this international movement, a BJD initiative was launched by the JOA, and the BJD Japan National Action Network was organized by 45 medical societies and four sports organizations in May 2000. The acronym "BJD" was translated into Japanese as Undouki no Junen: undouki means "locomotive organs" and junen means "decade". Thus, the JOA linked the *Undouki no Junen* movement with the Hone to Kansetsu no Hi movement and has been playing a central role in promoting awareness of orthopedic problems in Japan.

The Japanese word undouki refers to the organs that move the body, and therefore includes bones, joints, ligaments, muscles, the spinal cord, and peripheral nerves. Although the word *undouki* was somewhat unfamiliar to Japanese people at the beginning of the movement, it is gradually being recognized through the above efforts. However, I believe that further activities aimed at educating the general public in this respect are necessary.

Faced with an aging population and a declining birth rate, the Japanese Government has undertaken a comprehensive reform of the health-care system and released the Cabinet Office's report "New Health Frontier Strategy" in April 2007. The report identified nine areas that require government intervention: nursing care was taken up together with cancer, metabolic syndrome, women's health, children's health, mental health, and others. The Ministry of Health, Labour and Welfare

Offprint requests to: K. Nakamura Received: November 14, 2007

then announced a concrete strategy to decrease demand for nursing care, which involved the establishment of a new fund for scientific research focusing on locomotive ability in the elderly. This research will focus on early detection of any decline in locomotive ability caused by "undouki diseases" and on early action to prevent their deterioration.

People are now looking for easy-to-understand medical services. The JOA plans to develop simple pretests to assess an individual's locomotive ability and to identify those who are at risk and are highly likely to need nursing care. We propose that the term "locomotive syndrome" be adopted to designate the condition

evident in this high-risk group. If this term can be easily remembered by the general public, it is hoped that more attention will be given to the prevention of "undouki diseases". If people can evaluate their own locomotive ability using the simple tests proposed, they might recognize the value of early prevention more easily. With the growth of the "super-aged" society, the role of orthopedic surgery will undoubtedly become more prominent. Therefore the JOA will continue to emphasize to the general public the importance of preventing "locomotive syndrome" and will continue its efforts to provide high-quality orthopedic treatment for those in need.