Progress in medical technology has decreased mortality rates, prolonging the mean life span. A decreased birth rate has led to an increase in the proportion of elderly persons in the population. The trend toward growth of the elderly population is seen mainly in developed countries. In Japan, the growth rate of the elderly population is considerably higher than in other developed countries.

The elderly population refers to the proportion of persons aged 65 years or older in the total population. The World Health Organization (WHO) and the United Nations define an “aging society” as one in which more than 7% of the population is 65 years or older, an “aged society” as a society in which more than 14% of the population is 65 years or older, and a “super-aged society” as a society in which more than 21% of the population is 65 years or older. Since 2013, Japan has been a super-aged society in which more than 25% of the population is 65 years or older. In other words, 1 in 4 persons...

**Figure.** Age-specific distribution of out-of-hospital cardiac arrest patients in Japan in 2012.
in the Japanese population is elderly and the elderly population of Japan is forecast to continue to grow in the future.\(^1\)

Aging of society has received considerable attention as a social problem in developed countries. Because this trend is particularly marked in Japan even as compared with other developed countries, the world has focused its attention on the future of healthcare in Japan. Cardiopulmonary resuscitation is no exception (Figure). The All-Japan Utstein Registry is an extremely large, internationally unprecedented, population-based registry of individuals who had an out-of-hospital cardiac arrest (OHCA) in Japan. This registry has provided various types of evidence.\(^2-4\)

In Japan, outcomes for OHCA patients have improved over the years, and in this issue of the Journal Funada et al report that this also applies to elderly patients (age \(\geq 75\) years).\(^5\)

Elderly OHCA persons generally have poor outcomes. An increase in the elderly population is thus expected to lead to poorer outcomes in OHCA patients in general. However, the Utstein Osaka Project\(^6\) and the SOS-KANTO 2012 study\(^7\) report that the outcomes of OHCA are improving despite an increased proportion of elderly patients with OHCA.

Emergency cardiopulmonary resuscitation with the use of an automated external defibrillator in a prehospital setting has been widely disseminated, and the range of approved treatments able to be performed by rescue team members has expanded, contributing to improved outcomes of cardiopulmonary resuscitation in general.\(^8,9\)

Progress in various devices has also contributed to improved treatment after arrival at hospitals owing to factors such as an increase in the upper age limit of patients able to receive treatment for underlying diseases.

In recent years, the goal of treatment for cardiac arrest is not only the return of spontaneous circulation (ROSC), but also favorable neurological outcomes. Treatment of underlying diseases after achieving ROSC is a prerequisite to good neurologic outcomes. Because many elderly persons have age-related impairment of multiple organ systems, as well as systemic disorders caused by lifestyle-related diseases, comprehensive medical care is required. It is also important to effectively manage the convalescent and chronic stages as well as the acute stage of disease in elderly patients. Comprehensive care thus plays a particularly important role in the treatment of elderly patients. An improved quality of medical care requires multi-occupational cooperation and a team-based approach. Cardiac rehabilitation is included in such care.

An increase in the age of patients in whom treatment is indicated has improved the outcomes of cardiopulmonary resuscitation in elderly patients. Although progress in treatment has contributed to improved outcomes, as well as the increase in the upper age limit indicated for treatment, how far the upper age limit can be increased in elderly patients with decreased reserve capacity remains unclear. Recent studies have reported treatment strategies indicated for patients aged 80 years or older, such as percutaneous coronary intervention for acute coronary syndromes.\(^10\) However, treatment of patients aged 90 years or older remains a matter of debate. The indications for treatment should be urgently evaluated, including factors other than age, such as the Glasgow Coma Scale motor score\(^11\) and regional oxygen saturation.\(^12\)

**Disclosures**

Conflict of Interests: None to declare.

**References**