

LYMPHOEDEMA IN JAPAN: CURRENT ISSUES

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Lymphoedema is a worldwide problem, and yet, until recently it has been considered a relatively unimportant health concern. In developed countries, it mainly occurs following surgical treatment for cancer. Recent studies have helped to raise awareness of this condition and have indicated that it can lead to a decrease in quality of life (McWayne and Heiney, 2005; Franks et al, 2006; Heiney et al, 2007).

While many patients in Japan suffer from lymphoedema, there are no data currently available on this condition except for one research report that predicts that 72,514 (95% confidence interval [CI]: 71,196–73,832) patients will suffer from lymphoedema by 2020 (Kitamura et al, 2005). As survival rates after cancer surgery are expected to improve (Cancer statistics in Japan, 2008), there is likely to be an increase in the prevalence of lymphoedema. In Japan, lymphoedema is no longer a condition that can be ignored. This article discusses the history, treatment and current issues of patients with lymphoedema in Japan.

History of lymphoedema treatment in Japan

The history of lymphoedema treatment in Japan begins in the 1970s when a few specialists in lymphoedema appeared. Before that, healthcare professionals did not know much about lymphoedema. Although they described it as a post-operative side-effect of cancer, they concluded that it was an untreatable symptom once

acquired. Patients could only hope that swelling would not occur in their limbs, and uninformed patients did not understand what was happening when swelling began.

The main strategy at that time to combat lymphoedema was surgery, which was not significantly effective. Few doctors were familiar with conservative lymphoedema treatments, such as manual lymphatic drainage (MLD), massage and compression therapy. In Japan, only a few cardiologists performed such conservative methods. The very first article on the

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treatment of lymphoedema using a non-surgical strategy was published in 1972 (Yamazaki et al, 1972). Since then, these doctors have used non-surgical methods to treat lymphoedema while continuing their work as cardiologists (and are now well-known as pioneers in managing lymphoedema). During the 1980s–1990s, the number of surgical interventions decreased and their effectiveness was questioned.

In 1999, the first international conference on lymphoedema was held in Japan; a turning point for lymphoedema in this country which helped to raise considerable interest in the condition. This conference was organised by Mr Matsunaga, a patient with lymphoedema who wanted to improve conditions for other patients. Dr Eiker, his doctor, was invited as a keynote speaker. Since then, a number of specialist lymphoedema clinics have been opened by doctors and other

healthcare professionals, including nurses, and concerns have been raised regarding lymphoedema care in Japan.

Also in the same period, four patient support groups emerged: 'Lymphnokai' (Society of Lymph), 'Asunarokai' (Society of Asunaro), 'Rinrin' and the 'Support group of lymphoedema'. These all had the same objectives of offering support and education to those suffering from lymphoedema, but were located in different geographical regions. A special interest group (SIG) for lymphoedema was also established by the Japanese Society of Lymphology and talks are now given to patients suffering from lymphoedema.

The first school for lymphatic drainage was set up in 1999 by an acupuncturist who had studied the Földi method in Germany. The first phase of treatment consists of skin care, MLD, range of motion exercises and compression, usually applied with multilayer lymphoedema bandaging (MLLB). Phase 2, which is initiated immediately after phase 1, consists of compression by low-stretch elastic stockings or sleeves, skin care, exercise and MLD.

Lymphoedema treatment today

The current treatment for lymphoedema in Japan is known as complete decongestive therapy (CDT). This is recommended as the standard conservative treatment by the International Society of Lymphology (ISL). There are many kinds of therapy for lymphoedema such as the Vodder and Földi methods. Today, most schools throughout the world providing lymphoedema training teach all components of CDT, including the advanced version of Vodder's manual

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lymphatic drainage. In Japan, the Földi method is the most popular because, as said, the first therapist in Japan was educated at the Földi clinic in Germany.

Many therapists in Japan have studied at institutions abroad and, as a result, different names are used depending on where the individual therapist studied. Academic societies are now trying to unify the name.

Some specific treatments have been used in Japan that are not carried out in other countries, as they do not have the published scientific evidence base to travel. The intra-arterial lymphocytes injection for treatment of lymphoedema (Katoh et al, 1984) was developed in Japan, and has been presented in the Consensus Document of the International Society of Lymphology (ISL, 2003). This method is based on the hypothesis that intra-arterial injections of autologous lymphocytes would hydrolyze tissue protein. In addition, the epidural block and lumbar sympathetic block techniques, which are thought to improve microcirculatory blood flow, were developed in Japan. However, these methods are rarely used nowadays as their long-term effects could not be obtained.

Recently, supermicrosurgical lymphaticovenular anastomosis has been developed in Japan for the treatment of patients with lymphoedema (Koshima et al, 2003; 2004). This technique, which has made possible the precise anastomosis of small vessels (less than 0.8mm in diameter), can be applied to patients whose large lymphatic trunks have disappeared. It is now seen worldwide as the frontrunner in operative methods (Nagase et al, 2005), however, the long-term effects have yet to be determined.

Current issues in Japan

There are a number of specific issues concerning the treatment and management of patients with lymphoedema that may not be relevant in other countries. Qualifications for undertaking CDT have not yet been determined. As CDT is not an invasive approach, therapists performing this technique have different qualifications.

Also, as all lymphoedema treatments with the exception of surgery are not covered by the national health system, medical staff at national health insurance sponsored hospitals are unable to help patients suffering from lymphoedema. Therapists who have studied abroad and returned to open CDT schools do not have medical qualifications. Thus, although lymphoedema care should be placed within the arena of medicine, many lymphoedema therapists are not medically qualified. A legal system recognising qualifications for these therapists is urgently needed.

A number of difficulties have arisen for the treatment of lymphoedema in Japan. Firstly, the humid weather often results in patients refusing to wear compression garments; and

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this is the main reason for patients discontinuing therapy. Secondly, as said above, no therapies or devices for lymphoedema are covered by national health insurance, so patients need to pay at least 50,000JPY (nearly 500US\$) for their treatment and compression hosiery per year.

From April 2008, preventive education for postoperative patients with uterine cancer, gynaecological cancer, prostate cancer and breast cancer with axillary lymph node dissection will be covered by national health insurance on a one-time only basis, and compression sleeves/stockings will be partly covered by reimbursement. Although this will only reduce some of the costs for lymphoedema patients, it is a step in the right direction as it is the first time that they have received government support.

Only registered nurses (RNs) or physical therapists (PTs) will be able to provide the preventive education. However, these healthcare professionals have not as yet received education in lymphoedema care. To overcome these issues, the Japanese Society of Lymphology, the Japanese College of Angiology, the Japanese Association of Rehabilitation Medicine, and the Japanese Society of Phlebology are now collaborating to provide a new qualification specifically for lymphoedema specialists. JL

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