Enhancement of ADL (Activities of Daily Living) for Patients with Ankylosing Spondylitis (AS): Roles of Occupational Therapists

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Ankylosing Spondylitis (AS) is a systemic disease which affects mainly the spine. In severe cases, it will result in fusion of the spinal joints causing limitation of spinal range of motion, thus affecting mobility and functions. The roles of an occupational therapist (OT) are to help clients suffering from AS to actively participate in activities and to engage into their living community. OT will first conduct a detailed assessment to identify the performance that a client with AS concerns most and subsequently plan suitable intervention strategies and treatment to facilitate their independence and function.

To help AS patients to resolve the difficulties encountered in activities of daily living (ADL), prescription of suitable aids and gadgets for these patients would be needed. Some of the common ADL aids that help to resolve the ADL problems are listed below for references:

Drinking is the most common basic task we do every day. When drinking from a cup or glass, a mild degree of neck extension is required to fill the mouth with fluids, followed by restoring the neck to neutral or a bit chin down position to enhance swallowing. Generally, we do this action smoothly without risk of choking. Due to decreased flexibility of the cervical spine, AS patients may have limited neck extension to assist this swallowing mechanism. As a result, choking is common and some may even experience pain and discomfort on forced neck extension. A flexi cup (Figure 1) with modified edge that fits the contour of the nose reduces the need of neck extension during drinking. Assistance with a drinking straw is recommended for patients who have very limited neck flexion and extension. However, only warm or cold fluid is recommended to avoid burning of tongue or lips if drinking hot soup or water from a straw (Figure 2).

Dressing is another essential daily task. Most people cannot imagine the spinal movements involved in dressing tasks. Without a stable spinal support, the shoulders and hips will not move smoothly to allow the garment to be fitted onto the body. AS patients have difficulty bending down to reach the feet to put on trousers, socks and shoes. Kyphosis in some patients may also hinder truncal movement. Wearing a jacket will be much easier than putting on a tight pullover shirt or T-shirt. Application of a dressing stick may help to pull the jacket to the other side of the body and ease wearing of the jacket. (Figure 3)

For pants or trousers, long handle reacher (Figure 4) can help position the pants to the legs and insert the legs into the pants. The sock aid is another good device to assist in wearing socks. The sock aid can widen the tight elastic opening of the sock such that it is easier to insert the foot into the sock (Figure 5). The long handle shoe horns can also assist in putting on and off shoes without much bending action. In terms of toileting and bathing, commodes and shower chairs may enable the user to sit stably to reduce risk of fall and to support the body during cleaning. Transfer in and out of bath tub can be difficult. A shower cabinet may be more suitable than a standard bath tub. Non-slip mat is essential to prevent slip and fall inside the bathroom. Hand rails at the side of toilet or bathing facilities can allow patients to hold onto the support during transfer.

In addition to the toilet facilities, firm bed mattress and sitting mattress may be considered to relieve long term pressure generated to the sacral region of the buttock and to prevent pressure sores. Wheelchair bound AS patients may have hip stiffness and knee flexion contracture. A high chair with firm back and neck support is necessary to support alignment of the body. In terms of work ergonomics, it is worthwhile to consult occupational therapist opinion for a visit to the work site and their prescription of furniture with appropriate height and size. In this way, AS patients can be protected from chronic stress on the neck and back.

In conclusion, AS patients are faced with a lot of challenges in ADL during the course of their illness. Prescription of appropriate aids and gadgets will improve their functions and enhance their quality of life. The role of occupational therapist is important to evaluate individual needs for these aids and gadgets.

Reference: All pictures are adopted from homecraft Rolyan Company Ltd. www.homecraft-rolyan.com