Dressing aids

S C M Mitchell

Dressing difficulties are widespread—for example, half of rheumatology outpatients having some difficulty.¹ A survey of people aged over 75 and living at home found that over 92% were independent in dressing, with about 5.5% needing help and 1.5% using an aid.² Only half of those in residential homes and 16% of those in nursing homes, however, were able to dress or wash without help.³ Most surveys have found general ignorance about dressing aids and in particular where to obtain them.^{1,2,4} Devices that help in dressing should not substitute for advice on appropriate clothing, its adaptation and material, or the development of dressing techniques specific to a person's needs. Many patients can be helped by being shown different methods of dressing. Thus, prior assessment by an occupational therapist may best direct the provision of aids. The key criteria for a successful dressing aid are that it should be easy to use, light, and resilient.

Reaching aids—Pick up or reaching aids benefit patients with restricted reach or difficulties with balance and range from lightweight to heavy duty. The basic features are gripping jaws, which may incorporate a magnet, a metal stem ranging from 40-125 cm in length, and a hand grip with trigger to open and close the jaws (fig 1). Prices range from £5 to over £65

FIG 1—Reaching aid

FIG 2—Dressing stick

depending on materials and attachments. When choosing a reaching aid it is important to consider the weight, hand grip, length, and main area of use of the aid. Reasonable coordination is required, particularly for the folding lazy tong type. A 60 cm length may be appropriate for use while sitting but over 80 cm will be needed while standing. Too long an aid, however, will hinder retrieval where there is limited shoulder movement.⁵ Folding reachers or ones that clip on to a frame or stick enable the aid to be carried, extending its area of use. Patients with weak arms or hands will require a lightweight aid, perhaps with a broad trigger and locking action to reduce the need for a sustained grip. Arm supports or a two handed grip can be incorporated to help those with weak wrists. The range of objects to be picked up will dictate the strength and size of jaw opening required and whether rotation of the jaws is needed.

Dressing sticks are commercially available but can be simply made by adapting a wooden coathanger (fig 2). The central hook is removed and a cuphook screwed into one end of the hanger. A rubber thimble, to which clothing will cling, can be placed on the other end or a notch cut into the wood. The aid can then be used to lift clothes or straps up over the shoulder when there is limited shoulder movement or weak arms. The hook can be used to pull up zips after attaching a keyring to the zip or catch loops sewn into garments. When there are difficulties bending, clothes can be pushed down by the notched or thimble ends. The stick will substitute for a reaching aid when there is poor manual dexterity or insufficient finger strength. A piece of webbing

tacked on to the hanger allows the aid to be used when there is inadequate grip. For many the standard walking stick may double as dressing stick.

Button hooks consist of a wooden handle and wire loop and enable buttons to be fastened with one hand. The button is captured within the loop, which has already passed through the button hole, and the button and loop are pulled back through the hole. By twisting the button hook the button is released, but good vision and function of the hands are needed. A more recent alternative is the one handed toggle button hook (fig 3).

FIG 3—Toggle button aid

Pressing the plastic handles opens out the loop enabling the button to be caught. The button is pulled through the hole and released by further pressure on the plastic handles. The aid is light and easier to use than the original button hook.

Stocking and sock aids—There are many varieties of stocking aid, though most are unpopular, subjects finding the aid requires more effort than no aid.⁶ Up to 45% of a mixed group of patients did not use their prescribed stocking aids, this being particularly common in the 70-80 age group.⁷ Stocking aids are useful where there is limited hip movement or restricted bending—for example, in the early days after hip replacement—but most require reasonable manual dexterity to place the stocking on to the aid or even to assemble it. Stocking aids usually take the form of a gutter or rigid structure over which the stocking is

FIG 4—Travel sock aid

Department of Medicine
for the Elderly, St Luke's
Hospital, Bradford
S C M Mitchell, MRCP, senior
registrar

Series edited by: Professor
Graham Mullay.

BMJ 1991;302:167-9

FIG 5—Flexible sock and stocking aid

FIG 6—One handed sock aid

FIG 7—Dorking stocking gutter

stretched, the aid is lowered to the floor and the foot placed inside the gutter, the combined stocking and gutter being pulled up the leg by means of tapes or handles. A survey into eight types of stocking aid came out strongly in favour of the travel sock aid.⁷ This consists of a outer cloth cover over an inner plastic shape (fig 4). The stocking grips to the cloth and the aid is pulled up the leg by means of tapes. Hand grip can be

FIG 8—Spring loaded lace aid

FIG 9—Hooked dressing aid for laces

improved by tying knots into the tapes. This is no longer available but the similar flexible sock and stocking aid (Nottingham Rehab and Helping Hand Company) comprising a low friction inner nylon surface and outer terry towelling cover with looped tapes (fig 5) is effective. Other recommended aids were the Swedish one handed sock aid (Llewellyn Health Care Services) (fig 6) and the Dorking stocking gutter (fig 7).⁷ The stocking gutter is greatly improved from the standard gutter type by its shorter gutter and deeper notches, which better retain the stocking. Similar types of aid are made by several companies. The cloth type aids are efficient and comfortable and suit most weights of sock or stocking but are more expensive than the plastic gutter types. The fabric dress aid consists of two long fabric tongues that are fixed together and fed into the stocking, which is attached to the aid by suspenders. It is rather cumbersome but comfortable. Tight aids are usually in the form of conjointed stocking aids. The Swedish version consists of two one handed stocking

aids held together by a clip, the clip falling off at mid-calf. The double stocking gutter requires excellent hand function to feed the tights on to the aid. Both types of aid take the tights to the knee with the remaining difficulty of pulling the tights over the hips when there is poor hand or shoulder function. Thus, though useful for patients with limited hip movement, they may not be appropriate for those disabled with rheumatoid arthritis or stroke. There is no suitable appliance for putting on elastic stockings. Both the elastic stocking aid frame and the elastic stocking aid gutter have been found to be extremely difficult to use by both patients and controls, a particular problem being feeding the stocking on to the aid.

Shoe horns are commonly used by elderly patients, being used by a fifth of subjects in one survey of patients aged over 80.⁸ Factors to consider when choosing a shoe horn are the mode of putting on shoes and the degree of spinal rotation and ankle movement. For those who can stand or who have poor hip movement a long shoe horn is preferable, the optimum length being between 53 and 62 cm.⁷ When there is limited back mobility or reduced ankle movement a shoe horn with a stiff spring will help. The length of leg from knee to heel should be assessed, too long a shoe horn being difficult to use from a sitting position. Shoe horns with a built up handle are available to improve grip. The most popular plastic shoe horn has a hook handle that can help pull on other items of clothing but is only 43 cm long.

Shoe levers usually take the form of a large notch cut into a plastic or wood frame and help removal of shoes or boots. The aid is stabilised with one foot and the other shoe placed into the cutout shape, eliminating the need to bend. Evaluation of boot removers showed the Bootsoff version to be more efficient than the wooden shoe remover (Homecraft), which is unstable on carpeted floors.⁷ Alternatively, a notched dressing stick may be adequate, provided the edges do not catch the skin or stockings. In practice, however, it is usually safer to sit down and lever the shoe off with the other foot.

Shoe ties help patients who can bend but have poor manual dexterity or loss of function in one hand, eliminating the need to tie shoe laces. The No Bows aid is a spring loaded shoe lace aid. The laces are threaded through the aid, knotted to form a loop, and gripped by the spring. Pressing the two ends of the aid together releases the laces, which are tightened by sliding the aid up the laces while tethering the looped end with the little finger (fig 8). Although marketed for one handed use, two hands are required to assemble the aid and a strong pinch grip is required between thumb and forefinger with good finger coordination. Evaluation in patients with rheumatoid arthritis showed only 14% were able to press the spring together.¹ They may be of help, however, to patients with a stroke. Alternatively laces can be fastened by velcro by using a hooked dressing stick (fig 9). Details on one handed tying methods can be obtained from the Disabled Living Foundation. Fastening the shoe with wide velcro straps will eliminate the need for laces.

Elastic shoe laces enable laceup shoes to be slipped on with the help of a shoe horn without untying the laces and are thus helpful for those with restricted hip flexion or poor hand function. Shoes tied with elastic laces, however, provide less support than ordinary laces. To avoid the tongue of the shoe being trapped when the shoe is put on either the laces can be inserted through the tongue or a hole made into it through which the hook of a dressing aid can be inserted. Elastic laces come in three sizes from most major suppliers and have an approximate life span of three months.

Fasteners—One handed fasteners appropriate for

FIG 10—Kempner fastener

FIG 11—Edgeware brace

weak or one handed use include Kempner and Velcro types. The Kempner fastener consists of a sliding hook and bar threaded on to tape or webbing (fig 10). Garments can be closed without tension by attaching the hook to the bar and then tightened by pulling on the tape. Pulling in the opposite direction loosens the tape. Edgeware braces are elastic braces with a single point of attachment at the back and are worn like a school satchel (fig 11). Trousers can be lowered without removing overgarments by releasing a velcro fastening on either side at the front of the braces, allowing braces to be extended. The pattern is obtained from the clothing advisory service of the Disabled Living Foundation.

The zippade is a long cord with a hook that fits into the pull of the zip helping those with limited dexterity. It is available in haberdashery shops.

Clip on ties can be attached one handed over the top button of the shirt collar and may be useful to hemiplegic or parkinsonian patients.

Where to obtain aids

Wherever possible aids should be tried before purchase. The disabled living centres will demonstrate and advise on a wide range of aids but do not sell any appliances. Occupational therapists are available to patients in hospital and at home through the social services. Although some local authorities will lend out aids on a long term basis, others require the aid to be purchased. Ideally, aids should be available on loan, perhaps for a trial period, before purchase. Although aids are available through mail order catalogues, prior assessment through either disabled living centre or occupational therapists is advised.

I thank Linda Tomlinson, senior occupational therapist, Bradford Royal Infirmary, for her help in preparing this article.

Appendix

USEFUL ADDRESSES/PUBLICATIONS

Disabled Living Foundation Clothing Advisor, 380-384 Harrow Road, London W9 2HU (01 289 6111). Advice by post (send sae) or visit by appointment.

Disabled Living Foundation produces a series of books on

clothing needs and dressing for the disabled, details of which can be obtained from Haigh and Hochland, The Precinct Centre, Oxford Road, Manchester M13 9QA (061 2734156).

Clothing and dressing for the disabled. In: *Disabled Living Foundation Service Handbook*. 5th ed 1981. Oxford: Equipment for the Disabled, Mary Marlborough Lodge, 1981.

Fashion Services for the Disabled, Units B270-B320, Saltaire Workshops, Ashley Lane, Shipley, West Yorkshire BD17 7SR (0274 597487). Training and research centre into clothing needs. Free courses. Workshop designs and makes garments to meet individual needs.

The Scottish Council on Disability, Princes House, 5 Shandwick Place, Edinburgh EH2 4RG.

Turnbull P, Ruston R. *Clothes Sense for Disabled People of all Ages*. Purley: Piel Caru, 1985.

Jay P. *Coping with Disability*. London: Disabled Living Foundation, 1984.

Darnborough A, Kinrade D. *Directory of Aids for Disabled and Elderly People*. Cambridge: Woodhead-Faulkner, 1986.

MANUFACTURERS

Nottingham Rehab, Customer Service Department, 17 Ludlow Hill Road, West Bridgeford, Nottingham NG2 6HD (0602 234251). Mail order catalogue *Ways and Means* from Freeport, Nottingham NG2 1BR.

Boots the Chemists, Medical Merchandise Department, Nottingham NG2 3AA. Booklet *Healthcare in the Home* from any Boots store. Home delivery service.

Homecraft Supplies Ltd, 27 Trinity Road, London SW17 7SF (01 672 7070).

The Helping Hand Company, Mecanoids Ltd, St Catherine Street, Gloucester GL1 2SL (0452 500200).

RSFU Sweden, Obtainable through Llewellyn Health Care Services, Carlton Street, Liverpool L3 7ED (051 236 5311).

British Red Cross, Medical Aids Department, 76 Clarendon Park Road, Leicester LE2 3AD.

1 Howell C. Survey into the prevalence of dressing problems. In: *An assessment of the use of lower limb dressing aids*. Publications Unit, No 2 Site, Manchester Road, Heywood, Lancashire, Department of Health and Social Security, 1986.

2 Clarke M, Clarke S, Odell A, Jagger C. The elderly at home: health and social status. *Health Trends* 1984;16:3-7.

3 Clarke M, Hughes AO, Dodd KJ, et al. The elderly in residential care: patterns of disability. *Health Trends* 1979;11:17-20.

4 Chamberlain MA, Stowe J. A survey of personal aids supplied by post to arthritics. *Rheumatology and Rehabilitation*. 1980;19:246-51.

5 Dawkins ME. Report of an assessment of long handed reachers at Middlesbrough general hospital. Lancashire: Department of Health and Social Security, 1986.

6 Howell C. Survey into the usage of stocking aids. In: *An assessment of the use of lower limb dressing aids*. Lancashire: Department of Health and Social Security, 1986.

7 Howell C. An assessment of the use of lower limb dressing aids. Lancashire: Department of Health and Social Security, 1986.

8 White E, Mulley GP. Footwear worn by the over 80's: a community survey. *Clinical Rehabilitation* 1989;3:23-5.

MIRROR OF MEDICINE

The third largest group of advertisements in 1889 was those for homes, asylums, health resorts, and hotels. These featured, perhaps surprisingly, hydropathic establishments as well as inebriate retreats and mental asylums. Their inclusion illustrates the *Journal's* practice at this time of accepting advertisements regardless of BMA policy. Income was the priority. Drawings of homes and asylums were sometimes reproduced in advertisements. They were generally described as being spacious, well appointed, warm, and comfortable. One wonders whether the reality always matched the publicity. Advertisements in this category were often quite specific about the social class of their clientele; for example, the Leicestershire home for lady inebriates stressed that it accepted clients only from the "Upper and Higher Middle-Classes." Clearly class distinction was to be upheld as much among drunks and drug addicts as in the rest of the population. These establishments seldom publicised their fees, but in 1889 £52 was enough to secure a year's board at James Murray's Royal Asylum in Perth.

Health resorts were often discussed in the *Journal's* editorial columns from the 1880s. In 1889 a short lived *Journal of British and Foreign Health Resorts* was launched. The *BMJ's* advertising columns reflected such developments. In 1899 as many as four Egyptian hotels offered themselves as winter health resorts. One, the Tewfik Palace, near Cairo, offered golf, shooting, riding and driving, and boating on the Nile, as well as the

services of a medical director and physician and a lady superintendent who took responsibility for nursing and massage. Its prices were not disclosed, but a 65 day cruise of the West Indies with the Royal Mail Steam Packet Co could be had for £65. Beside all this the lure of Aberystwyth paled somewhat, notwithstanding its "perfect drainage," an endorsement by Sir James Clark, and its claim to be "The Biarritz of Wales."

To put the prices of hotels and asylums into a context of medical salaries, it is necessary only to turn to the *Journal's* situations vacant pages. Certainly those who were attracted by positions such as that of junior house surgeon at the Royal London Ophthalmic Hospital in City Road, or a similar post at Hull Royal Infirmary, where the annual salaries were £50 and £40, plus board and lodging, respectively, were unlikely to be among the Royal Mail's passengers. Indeed, West Indian voyages would have been beyond the pocket of most general practitioners, who, it seems from the practices offered for sale in the 1899 *BMJ*, were doing very well to achieve an income in excess of £700.

From *Mirror of Medicine: A History of the BMJ* by P W J Bartrip. Published jointly by the *BMJ* and Oxford University Press; BMA members' price UK £29, overseas £33, including postage. Obtainable from the Publishing Manager, *BMJ*, PO Box 295, London WC1H 9TE. Non-members UK £35. Obtainable from OUP Distribution Services, Saxon Way West, Corby, Northamptonshire NN18 9ES.