

INTRODUCTION



There has been confusion about the role of garments and braces for the back in past years. Clinicians have not been certain whether such garments should be prescribed for partial support and immobilization, for immobilization as complete as possible, or simply for comfort during recovery from an acute attack of low back pain. In overview these garments have, in the past, been regarded as useful for relieving pain by restricting movement. The source of the confusion is that these garments are used in two entirely different ways.

The Rigid Garment

In 5% to 10% of patients seen in a back clinic, the type of garment or brace that restricts movement and gives rigid support is without doubt of considerable help:

- For people with osteoporosis when other measures do not relieve the pain.
- In cases of instability, as produced for example by isthmic or degenerative spondylolisthesis.
- For patients with advanced degenerative spondylosis, especially when there is marked scoliosis.
- In some patients after an operation to fuse the spine as the patient begins to become active again after discarding a plaster of Paris jacket.

Other supports, such as a pelvic strap for the management of a sacroiliac syndrome, have been found useful by some clinicians.

The Elastic Garment

For 90% to 95% of patients the problem is quite different. There are many theories that attempt to explain the rationale for the use of this type of garment in the treatment of acute and chronic low back pain. Many of these are attractive. None are proven. The reader will see this when perusing one article after another of this journal.

Elastic garments for the back and for sports. It is useful to think of the garments used for back

pain in the same way as one thinks of those designed for sporting activities. The latter aim at excellence through activity and motion. Each athletic activity has its own special kind of garment which has several of the following characteristics:

- It is of lightweight elastic material such as lycra or spandex.
- It gives some support to trunk, pelvis, and/or legs.
- It provides protection against injury to the skin and underlying soft tissues.
- In some cases it is designed to protect the body against cold.
- It has symbolic significance as a sign that the wearer is engaged in some particular sport, whether skiing, scuba diving, cycling, or other activity.

Cycling trunks. We can consider the trunks worn by cyclists in this kind of way. They fulfill all the criteria just listed.

- One type extends from just above the waist to the knee.
- The other type extends from above the waist to the ankle.
- No enthusiastic cyclist would dream of setting forth on a ride unless properly dressed in the gear just described. It is designed for health through activity.

The elastic garment often recommended in the management of low back pain is similar in most respects to the cycling trunks described above:

- It is made of the same kind of elastic material (25% spandex, 75% cotton).
- It gives some support to trunk and thighs.
- It gives some protection against cold weather but is not unduly warm in hot weather.
- Usually it extends from six inches above the waist to just above the knee. If necessary the upper part can be taken still higher.
- From a psychological point of view, it is important for the patient to use something given by the physician. To wear a garment is better than to continue to take medicine or drugs.

- The symbolic significance is as cogent as in sporting activities. In the case of patients with back pain the implied meaning is “health through activity.”

The Clinician’s Decision

Each physician, chiropractor, or physical therapist has to decide whether to take advantage of the benefits afforded by an elastic garment and what type he or she will use. It is rarely wise to use the garment alone. It should be prescribed in conjunction with a program of exercises and with education in Back School. Assessment of the value of the garment should be made as part of the regime just described. This has not yet been done. Of course it should be done in a controlled study.

As clinicians we need to remind ourselves that often in the management of back pain we cannot achieve the degree of scientific precision for which we aim.

The influence of the Hawthorne Effect is a powerful one. Patients often respond more effectively

and rapidly to the feeling that the doctor or therapist is interested in them and cares for their well-being rather than to any particular combination of therapeutic measures. This was studied by sociologists in the 1930s at the Hawthorne Plant of Western Electric.

The Ackhoff Dictum states that any one problem in an individual or group (1) constantly changes, (2) interacts with other constantly changing problems and, (3) the result is what Russell Ackhoff described as a “mess.” The role of the successful clinician or CEO is not simply to manage a problem but to bring order out of chaos in dealing with such a mess.

The effectiveness of the elastic garment is in part because it enhances the Hawthorne Effect and enables the therapist to deal with Ackhoff’s “mess.” This, though perhaps unsatisfactory for the pure scientist, is not surprising because man (and woman) is a mixture of mind and body.

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