

Informed Consumer Information—Bracing

By Margaret Hinman and John Callan, C.O, L.O, orthotist, Colorado Springs, Colorado. Thank you, John.

Acquiring bracing, whether for the first time or as a replacement for a current brace, involves not only a major financial decision but also has significant physical and emotional implications. For polio survivors who have not used brace(s) in many years and who celebrated the time when they got rid of that old leather and metal monstrosity, the return to bracing because of returning weakness and the effects of aging can result in grief for the loss of former mobility. It can also recall the memories of the times when they originally wore braces. For those persons, dealing with those issues will help the wearer be more amenable to wearing the brace(s), which will ultimately improve mobility, provide for increased safety and improve the quality of life.

Those of us who currently have braces are aware of some of the advances that have been made since the 1950's and 60's. We know that there are new materials that make the braces lighter and, in many cases, more functional and versatile. Plastics and graphite composites, aluminum, stainless steel and titanium metals as well as various styles of joints are some of the materials choices that are available. And, all have their positive and negative aspects.

The days when a person was fitted for a brace and then got what was given to him/her no longer exist, that is, if one will take the time and effort to become informed about options. Brace wearers now have choices and have a right to some say in the decisions that go into the making of a new brace. At the same time, it is the responsibility of the orthotist to make sure that the brace one is getting will safely accomplish its purpose.

After the doctor writes that prescription and the issues of insurance allowances and payments for braces, and which orthotists (brace makers) the insurance company will pay, it is time to do some research in order to insure that you get the very best brace for you. To help with that research, here are some issues to consider:

1. Goals and limitations--Before going to the orthotist, ask yourself what your goals and limitations are in acquiring the brace. Knowing your physical conditions that bracing is supposed to address and having

some idea what you want the brace to do and how you want it to feel allows you to communicate those priorities to the orthotist. It also allows you to assess if those needs can be met by that orthotist, another orthotist, or by any orthotist. If you are having difficulty sorting those issues, you can also ask the orthotist to help you define those goals.

2. Know who is doing the work with and for you. There are many people involved in the brace-making industry and in the brace-making process, including orthotists, orthotic technicians, and fabricators, to mention a few. The American Board of Certification for Orthotists, Prosthetists and Pedorthotists web site at www.abcop.org has a list of certified and licensed orthotists in your area.

The letters after the service provider gives you a clue as to what their certification includes: Certified Orthotist (C.O.), Certified Prosthetist (C.P.) or Certified Prosthetist-Orthotists (C.P.O.). Orthotists work with bracing and prosthetists work with artificial limbs. Some practitioners do both orthotics and prosthetics.

Orthotist often specialize, although they may be able to do general orthotics. Specialties may include the lower extremities, the upper extremities, spinal orthotics, pediatrics, and geriatrics. They can also focus on orthopedic problems or neuromuscular problems, can do custom fabrications or provide off-the-shelf orthotics.

3. Bracing options—Find out what kinds of braces this orthotist can/is willing to provide. There are many different orthotic products available and an exploration of the options will help you make the decision about what will work best for you. Find out what materials are available, what kinds of joints are available and what the different designs will do and not do. Also, involved in this part of the decision is whether the brace will come off the shelf, will be custom built in house or come from another vendor.

New bracing technology and changes in functionality can mean that one may not need the same kind of brace that has been traditionally worn. For example, persons who have traditionally worn a short leg brace (AFO or ankle-foot orthotic) may need to now use a long leg brace (KAFO or knee-ankle-foot orthotic). And, technology

is also available that allows some traditional KAFO wearers to only need an AFO.

4. Casting—Learn how the orthotist is going to do the casting. To be fitted for a custom brace, a cast will be made to provide a mold for the fabrication of the brace. How the cast is applied will affect how the brace fits. Orthotists can cast with the client lying down, sitting up or standing. A standing casting will more closely approximate how the client will use the brace while standing and walking. For those of us who cannot stand independently, the orthotist should have parallel bars so that the client will have something stable to grasp while being casted.

Also, learn if the orthotist will cast you as you are or will include corrections in the brace. For example, corrections can include such things as realigning foot and leg deformities and correcting leg length differences.

5. Building the brace—Find out who does the design work, who modifies the cast, who makes (fabricates) the brace. Usually, the orthotist who has done the casting can best modify the cast because (s)he has done the casting and knows the intricacies of your particular case. However, some orthotists specialize only in doing the casting, leaving the modification process to a technician and then sending the cast to a fabricator who builds the brace based on the modified mold.

There may not be an issue with this process but knowing that this is how the process is done by this orthotist can help pinpoint potential problems in the future, if they arise.

6. Follow-up and repairs—The next issue to discuss is what the orthotist will do after you take possession of the brace. Does getting the brace from this orthotist include follow up, and how much, and modifications, or are you stuck with the brace you take home? Is the orthotist willing to work with the client until the brace fits right and comfortably? Some orthotists will not do this, so it is wise to have this information up front. Does the orthotist guarantee satisfaction for the brace, and what does that guarantee mean? What happens if the brace does not work to your satisfaction? And, is there additional cost for this service?

Repairs and turn-around time when something goes wrong or breaks are part of the reality of wearing a brace, especially if worn for a long time. When a person has only the brace (s)he wears and the brace needs to be modified or repaired, the wearer can be immobilized without it. Some orthotists are sensitive to this and some are not, so it is helpful to know up front what the policy is and what to expect, particularly in an emergency.

The wearer's expectations also factor in. Many brace wearers get a new brace after wearing the old comfortable one for years and years and want the replacement to be exactly like it. Duplicating a brace exactly may not be possible even if the materials and the design are the same, because over time a brace structure changes gradually and often subtly, leaving the wearer of the new brace with feelings that the duplicate is not like the old one.

7. Physical therapy—It is beneficial to have some training in wearing the new brace. Because learning to wear a new brace takes time and practice, a physical therapist can provide invaluable help in adjusting to it, helping with gait and balance issues and in helping identify whether modifications might make the brace work better, fit better or be more comfortable. This is especially helpful if the client is requiring a duplicate of an old brace. Learn whether the orthotist works with a physical therapist. If not, find a physical therapist who will help you. Also, find out if you can bring that physical therapist with you to the casting and the fitting. Such a team approach will help you function better and provide more comfort and satisfaction in wearing the brace.
8. Insurance—It pays to check with the orthotist to make sure that the insurance company will pay their share of the cost of the brace. Also, before being casted, find out if the orthotist needs to check with the insurance company. This can save the surprise of getting that bill when you expected the insurance company to pay for it.

These are some of the issues that should be considered when getting a new brace. This will facilitate achieving the ultimate goals of bracing, to increase and improve functionality, to provide safety and to improve the quality of life of the wearer. Being informed about the brace you will be wearing before you get it will go a long way towards achieving those goals.