

Psychological Considerations in Bracing

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The finest orthotist in the world can fail in his task, in the sense that the patient may not use optimally the device built especially for him, if psychological factors are not taken into account. It is important that one be aware of such psychological considerations as emotional, intellectual, and perceptual factors.

The kind of person the patient was, his emotional and physical resources to deal with his tragedy all come into play in his adjustment to the rehabilitation process, of which bracing is an important accompaniment. Although these various factors will be discussed separately, actually they all interact with one another and the patient's behavior is the resultant of this interaction.

One of the major, but unobvious, problems that confronts a disabled person has to do with what psychologists call "body-image" or "body-schema." These terms are used to indicate the notions a person has concerning himself and his body. Abt (1) writes that body-image refers to the picture an individual has of himself as a person "extended into space, a person . . . who comes into contact with other spatially-extended bodies . . . Normally, among non-handicapped individuals . . . there is no discrepancy between the physical body of the individual and his conception of his physical body . . ." (p. 18). For instance, a nondisabled but very short woman reported that she could judge accurately just by looking whether or not she could reach an object on a high shelf. Others frequently misjudged the distance for her being sure either that she could or could not reach it. They were using their own body-schema as a reference point and hence misjudged.

For a patient to be able to use any brace effectively, it must become incorporated into his body-image. The problem appears to be similar to that of individuals driving a car. When a person starts to drive a car that is new to him, he usually has a feeling of unfamiliarity. He probably says something like, "I don't know where my fenders are yet." When he does know, the car, as a unit extended in space, has become incorporated into his body-schema.

We know some of the factors that are involved in assimilation of a non-body part into the body-image. The work of Held and Freedman (3) concerning motor-sensory feedback may be relevant here. They have performed a series of rearrangement experiments in which a subject has to make a motor-response to displaced visual or auditory cues. For instance, if an experimental subject wears prisms that displace the visual field ten degrees to the left and then is asked to touch the experimenter's raised finger, he adapts very quickly, but he does so much more rapidly if he touches the finger in a series of rapid thrusts than he does if he touches the finger more slowly. If he wears the prisms for the first time and the experimenter randomly

holds his finger up now here and now there, the subject will have much more difficulty adapting. Two notions suggest themselves from this line of work. One is the importance of providing sensory feedback to enable a person to make motor-adaptations and the second is the importance of consistency in fostering such adaptations. Another aspect of this problem has been touched upon by Abt (1). He pointed out that negative attitudes toward a prosthesis are detrimental to incorporation into the body-schema whereas positive attitudes are favorable. Training procedures appear to be of major importance in helping a patient to incorporate his prosthesis into his body-schema. They should take cognizance of the sensory feedback that the patient is or is not receiving, and they should certainly be consistent. Training is also very important in helping a patient to do away with negative attitudes. As Abt (1) has pointed out, training can be "a very helpful procedure for doing away, or partially doing away, with negative attitudes" (p. 19). It can be a great aid in the resolution of feelings of social rejection, for instance. The training process provides the opportunity of creating for the patient a positive experience, which makes for far more lasting learning than does just telling him.

A sense of equilibrium is also an important component of body-image. Body-symmetry seems to be a significant, but not altogether necessary, component of a sense of equilibrium. The wearing of a brace can increase a feeling of body-asymmetry, but it can also add a sense of balance. The feeling of being balanced frequently overcomes the sense of asymmetry from the added weight of the brace. A feeling of being balanced, then, can foster positive attitudes toward the brace which, in turn, fosters incorporation of it into the body-schema. On a psychological level, bracing, then, can be a major factor in reconstituting a body-image shattered by the disability.

Besides factors like body-image that reside within the patient, there are other factors that may be operating during your interaction with the patient, factors that may make the difference between success and failure. It is likely that one of your motivations in choosing your vocation is that you want to help people. It is appropriate, therefore, to explore the concept of help. As Dembo and her colleagues (2) have pointed out, help is seen as positive by the person who is giving it, but by the person receiving it, it is often seen as a mixture of good and bad. To the patient, to be fitted for braces may mean that he can get about much better than before; it may also mean that you do not care about him but you are just doing your job; it may mean that he is permanently disabled; it may mean that he is a burden to others; it may mean that he is relegated to a position of dependence. Abt (1) has pointed out still other meanings that arise when a non-disabled person helps a disabled one. It may mean that you pity him, even if you do not show it; it may mean that you are not emphasizing his abilities enough. It is possible for a disabled person simultaneously to hold many of these views of being helped. There are probably still other meanings, but the important point here is for you to be aware that your view of helping the patient is different from his. If you take the trouble to learn what the patient's views of help are, you will then know how to act toward him.

Implicit in these varying concepts of help is the question of values. Somers (4) has written that now that the person is disabled, he still looks at himself the way he looked at disabled people before he became handicapped. Dembo (2) has pointed out that acceptance of loss from a disability frequently requires that the patient change some of his values. She

names three kinds of values, which are determined by various attitudes that a person takes. The first kind of value she calls *possession* values. Owning a painting can be a possession value. In possession values, devaluation of the *person* cannot take place. The second kind of value Dembo calls *asset* values. Asset values are a personal characteristic, as for example, being able to play the piano. To play the piano is good in itself—the player enjoys it, for instance. The value of it is in no way dependent upon comparing himself with others. A patient can take the attitude that he is not less of a person because he needs a brace in order to walk. The third kind of values Dembo calls *comparative* values. Here, a person's sense of worth is dependent upon his position in relation to others. Often, adjustment to a disability requires that the patient shift his system of values. The patient will suffer less from feelings of worthlessness if he can be led to feel that his loss (of either an actual part as in an amputation or a loss of function as in a paralysis) is not essential to his value as a person. This change can come about if the scope of the patient's values is enlarged to include other personal characteristics. For example, you can behave toward the patient in such a way that you convey to him that though he has difficulty in walking, he is intelligent or a nice person or whatever assets he has that can be genuinely brought to his attention. Feelings of worthlessness can be overcome when the value lost comes to be regarded as an asset value rather than a comparative one. It is a good thing to be able to walk without a brace, but I am still a worthwhile person anyway. Another way of diminishing comparative values is, by your manner, emphasizing satisfactions in the present rather than past satisfactions.

The work of Existential psychologists has called attention to another aspect that is useful to consider and that aspect is *time*. Does the patient live primarily in the past, present, or future? By emphasizing the satisfactions in the present, one can sometimes guide a patient to a belief in his future. Here is a place where there may be a discrepancy between you and the patient. Training procedures and your own orientation are geared toward the future. A very depressed patient, for example, may be oriented toward his happier past. If you take too long a look into the future, your depressed patient may not be able to follow you, but if you emphasize immediate satisfactions, gradually he may come to see that he has a future.

A person who customarily uses a system of comparative values not only continually compares himself with others, but, if he has become disabled, he keeps comparing his former undiseased self with his present disabled self. Such an individual is apt to emphasize his disability at the expense of his remaining abilities. In your contacts with patients you can enlarge the areas the patient thinks about and in so doing help to focus his attention on other roles in life he plays besides that of a patient or a disabled person. Sometimes merely an interested inquiry concerning a family member is sufficient to start the patient on the road to thinking of himself as, for instance, a husband or father in addition to a disabled person.

Many patients have been acutely ill just prior to their starting rehabilitation. They have recently struggled with the profound problem of life and death. Whether or not their physical condition was actually that grave, they frequently feel that it was. If the patient does not cooperate with you, he may be feeling that you do not know how precarious his life is. He believes that if you coax him into activity you may well be killing him. A hemiplegic patient was heard recently telling his daughter that he did not

want to participate in ambulation class because of his heart. Even though the daughter told him that the physician had said that ambulation would not harm his heart, the patient persisted in his belief. Though it was not true of this man, some patients with such beliefs might find fault with their brace rather than indicate overtly what their beliefs were that made them unwilling to participate in certain of their classes.

Besides the problem that the patient has concerning his reactions to his disability, he often has to contend with the reactions of his family to him. It is important for you to realize that the people who are emotionally close to the patient share his tragedy and have to make analogous adjustments to it. They, too, cannot be expected to adjust to the loss immediately. Dembo and her colleagues (2) have pointed out some factors that are useful when we try to understand the reactions of family and friends toward the disabled person. They write of a disability as seen as a *misfortune*. They point out that if a person has a need to hold to this view, then one of two consequences is apt to result. Such a person may insist that the individual he considers unfortunate is suffering and that he ought to suffer, or such a person may devalue the unfortunate person because he ought to suffer but does not. Such attitudes may increase the difficulty the patient has in adjusting to his handicapped condition. The reaction of family and friends toward him is an important consideration in understanding your patient. Interpretation to family members of the brace, its use, care, and what it is designed to do either by you or the patient, is sometimes of help. If you want family members to be on your side, then to some degree you have to let them join the rehabilitation team.

As Sullivan (5) has pointed out, listening to a patient and understanding his point of view is almost as helpful as specific therapeutic measures. Patients do carry over toward staff various ways they handle family members. It is rare that a patient malingers. Hostility on the part of patients usually covers fear, feelings of discouragement, dissatisfaction with themselves, and anxiety. When a patient complains about his brace, it is natural for the orthotist to respond inside with defensive anger. These, then, are some factors other than your competence as an orthotist for your consideration. You now have other questions to consider as the possible reasons for the complaints. Hopefully, these other possibilities will reveal avenues that prove fruitful to explore in your efforts to resolve the problems at hand.

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