Socketless Option for Prosthetic Care

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social skills and social risk-taking, are important elements of recovery for physically disfigured persons. They must learn to deal with predictable hurtful reactions from naive observers, and learn to make themselves more lovable so that people will be fond of their physical differences.

5. The psychotherapist can help the patient in defining a new self-image. In the early months or years, the patient is encouraged to overcompensate and enjoy the positive identification of "hero." The survivor is counseled for rehabilitation gains and social accomplishments. Each victory is celebrated.

As the patient's physical and psychological adaptation stabilizes, the psychotherapist can assist the patient in resisting the temptation to remain satisfied with the identity of "heroic survivor." This role invites the survivor to strive to achieve expectations that are unrealistic, attempting to deny unhappiness or anger. The task of the psychotherapist is to make explicit the expectations that each burn survivor is a human individual who can be strong and competent, optimistic and autonomous and also can have moments of sadness, despair or rage. Such uncomfortable human feelings must be validated. The psychotherapist can guide the patient to accept vulnerabilities and flaws without detracting from the overall positive evaluation of "self." The person who has been the "heroic trauma survivor" can become a competent, interesting individual who also once suffered a serious injury and a terrifying experience.

Practical Considerations

In most of the countries where we have worked, professionally trained psychotherapists have not been readily available. However, in our model, where we talk about the "psychotherapist" we refer to a person who is trained in the role of a therapist, i.e. one who guides and accompanies the other through a journey. Such a person must be gifted with empathy and must like people; other skills can be taught, regardless of educational background. However, it is most helpful if ongoing consultation and supervision can be arranged to be provided by a well-trained expert.

Also, many countries have a social tradition of, on the one hand, overprotecting individuals with disfiguring conditions and, on the other hand, rejecting and ridiculing them. Both of these attitudes are more crippling to the individual than the physical condition. Human beings are remarkable in their creativity; they can devise ways of achieving their goals when they feel supported and encouraged. One young boy, who recently had lost much of his hearing and had all four limbs amputated following a terrible explosion, was asked if he had any impairments. He answered "I do not know." Thinking that perhaps he did not understand the question, Dr. Blakney said, "You know, some people would think you were impaired by not having your arms and hands." He responded, "I don't know, but I don't know if I am or not yet." That boy is now a grown man, living in an apartment by himself with a helper dog, driving his own truck and attending a university. His life has been very difficult, and he is not always happy. He always wishes, at some level, that he had his old body back. And, he would be happier if he had found his dream woman. But, he has accomplished much; he is optimistic, enjoys friends and he has hope for the future. He has always treated the attitude that he does not know what his limitations are. And the data and clinical experience we have gleaned, teaches us that we also cannot define the limitations of human resilience. ■

References


Biography

Patrick Blakney and Dan Cosenz are both senior members of the HMD Response International, Medical and Technical Advisory Board. For a decade they have designed, supervised and delivered training to mental health components of victim assistance programmes, addressing the needs of war.

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Every individual with a disability deserves the three things:
1. A high quality of life
2. The freedom to pursue that life, including employment opportunities
3. Free and open access to the community in which he or she lives

Amputees, regardless of the country, society or culture in which they live, are no exception. High-quality prosthetic care is especially crucial to amputees who live in agrarian, non-technological societies where cultivating the fields, grinding grain and cooking meals are all done with few or no mechanical aids.

Traditionally, artificial limbs have been constructed utilizing a socket, individually fabricated to fit the residual limb. Sockets for Prosthetic Technology challenges conventional prosthetic wisdom by bio-mechanically replicating the function of the socket without the form. This technology was conceived by the late Dr. Chaz Holder (1947-2002), himself a triple amputee, who understood all aspects of amputee care from both the academic and the wearer's point of view. Dr. Holder started developing the concept of socketless prosthetic technology in the mid 1990s. During the last one-and-a-half years of his life, he wore a socketless above-knee prosthetic, and work is continuing on the socketless below-knee and above-elbow designs.

When Socketless Technology was first created, Holder was aware of the specific needs of humanitarian prosthetic missions. The requirements of amputees around the world are the same, regardless of the political and economic conditions they live in. Key requirement to ensure successful and continued prosthetic use are:

- Comfort and light weight
- Superb functional performance
- Minimized secondary impact (heat and friction-related skin breakdown)
- Durability

Our first release, Below-Elbow Socketless Technology, has proven to be a superb solution to these problems, par-
Sockets lack the ability to be accommodated or to provide adequate support to the child's limb, and many children remain in a inactive state for prolonged periods. Awards and research indicate that children need therapy to prevent muscle atrophy and to keep them active. The LSN believes that such therapy is essential for enabling children to improve their quality of life.

There have been many attempts to create artificial limbs, and the most successful of these are based on the principles of biomechanics. These limbs are designed to be as natural as possible, to allow the child to move freely and to maintain a normal gait. However, these limbs are expensive and not always available to children in developing countries.

The LSN aims to improve the lives of children with landmine injuries by providing them with prosthetic limbs that are affordable, accessible, and effective. They work with local partners to design and manufacture limbs that are tailored to the child's needs. The LSN also provides training to local medical professionals to ensure that children receive proper care and support.

The LSN's research and development efforts have been recognized by international organizations, and the LSN is working to expand its services to other countries. The organization is committed to improving the lives of children with landmine injuries and to ensuring that they have access to the care and support they need to live fulfilling lives.