Editorial

The New Revolution

by Timothy B. Staats M.A., C.P.

The recent development and proliferation of advanced and precision fitting techniques in prosthetics have caused many prosthetists to re-evaluate those principles which were held sacred for the past twenty years. In the last three years in particular, both below-knee and above-knee prosthetics have undergone tremendous changes.

Many progressive practitioners recognize that the term "Patellar Tendon Bearing (PTB)" is no longer considered descriptive of a well designed below-knee socket and use the term only in a historical sense. The term Total Surface Bearing better describes what has superseded PTB philosophy.

In above-knee prosthetics, a greater revolution is in the offing. Now the CATCAM (Contour-Adducted-Trochanteric-Controlled Alignment Method) socket is shaking the underpinnings of the Quadrilateral above-knee socket design. For those of us who are "dyed-in-blue-and-gold-UCLA-Quad-socket" prosthetists, it is both difficult and exciting to see the development and confusion a rival design causes throughout the profession. I am sure that thirty years ago the "wood-socket-plug-fit" prosthetists shared a similar feeling when the quadrilateral socket and later the introduction of plastics caused their world to turn upside down.

The point is that change and improvement are inevitable. You can fight it and it will flow over you like a river, or you can go with the flow and learn to adapt to new techniques. I have been asked repeatedly what I think about the use of multiple check socket fittings, CATCAM, alginated check sockets, and the Flex-Foot. The list goes on and on. American prosthetists in particular must understand that we are in the midst of a full blown revolution and the results of this revolution will set the path we follow for the next couple of decades. Rather than question what is right or wrong without really having proof of either, I have chosen a path as the director of a prosthetics education program of "pouring fuel on the fire." What better time or place for controversy than at UCLA, where the first school was started over thirty years ago.

Is all this extra precision and care really necessary to accurately fit an artificial limb? The answer is quite simple, and if you are an amputee the question is repulsive. If superior techniques that can improve the quality of the care provided to amputees are available but are not used, it is nothing less than criminal.

There are those who would question: how much of a good thing is enough? That is a question that the patient must answer and the prosthetist must decide based on knowledge and education. The fact that many of the newer techniques and fitting regimes demand more time and effort than methods which have been in use for twenty years is entirely a separate issue. While it may not be possible to provide these services for the reimbursements, which are now received from payment sources, this does not mean that the techniques do not work or are wrong. It only means that the third party payers are ignorant of changes which have occurred in our profession and must be introduced to the benefits of new procedures.

This same principle applies to prescribing physicians. It is totally fair to say that a physician who took his prosthetics-orthotics training over five years ago is now out of date. The same is true for practitioners who have not upgraded their practices through educational opportunities during this period.

It is always uncomfortable when you begin to wonder whether you are doing the best you can for your patient. It is even more uncomfortable when you know you are not. We should never be satisfied with our work and never doubt that a better job can be done. With such a philosophical upheaval running rampant through our profession, the time for learning is

now. Are you satisfied with application of outdated techniques, or are you willing to enter a new era of prosthetic and orthotic practice? The choice is yours.

AUTHOR

Timothy Staats, M.A., C.P., is Adjunct Assistant Professor and Director of the Prosthetics & Orthotics Education Program at UCLA, Rehabilitation Center, 1000 Veteran Avenue, Rm 22-41, Los Angeles, CA 90024.

Editorial

The Role of Test Socket Procedures in Today's Prosthetic Practices

by Michael J. Quigley, C.P.O.

The proper role of a test socket procedure is a controversial topic in today's practice of prosthetics. A test socket procedure can be defined as that stage in the design of a prosthesis when a socket is fabricated solely for the purpose of determining proper socket fit. Although test sockets were originally used for upper limb prostheses, the true advent of the test socket was in 1972 when Mooney and Snelson[1] described the polycarbonate clear test socket as developed at Rancho Los Amigos Hospital. During the 13 years since that article, the proper role of the test socket procedure has still not been defined.

There are several reasons for the controversy over test sockets. First, when a test socket procedure is done, there is an implication that the mold, mold modifications, and socket design principles instilled in the prosthetist may not be correct. After all, if the prosthetist's techniques were perfect, the socket would fit perfectly and the need for a test socket would be obviated. However, any time a clear test socket is used, the prosthetist immediately notices a few things he would like to change in the definitive socket or, in some cases, the next test socket.

It is safe to say that the majority of United States prosthetists believe in the value of test sockets and use them on a regular basis. Indeed, insurance companies and most other third party reimbursers, including Medicare, pay for test sockets, thereby recognizing twin values. A test socket procedure makes good sense, and there is no question that it improves prosthetic fitting. However, it is also true that many prosthetists do not use these sockets, or use them only rarely. The group that does not use test sockets feels that they can fit nearly all prostheses well without test sockets and do not want to spend the additional effort that test sockets require, or they simply do not want to change the methods they learned many years ago. The present Veterans Administration's (VA) procedure for obtaining approval for test sockets seems to favor this latter group, since it is an intentionally cumbersome system that, in effect, discourages test socket procedures on VA patients.

Test socket users also include prosthetists who routinely use multiple test sockets on every patient, with the principle that each successive socket brings you one step closer to the perfect fit. If one test socket procedure is good, shouldn't two be better? Or three? Or more? This is a major area of controversy that could be discussed here but not resolved. Probably the best example of this use of test sockets is at the Institute for the Advancement of Prosthetics (IAP) in Lansing, Michigan (although a number of other prosthetic practices are also using multiple test sockets, or featuring them as a type of "first class" service).

An average of six test socket procedures are done on each patient in Lansing: beginning with static fittings in clear sockets with the patient