



ORTHOTIC AND PROSTHETIC SERVICES

A Step Ahead

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Upper Extremity—Adaptive Devices

Earlier this year I wrote on the topic of upper extremity terminal devices. Because of the interest shown in the topic, I am following up with information on specialized devices for more specific needs.

An amputee who has lost all or part of an upper extremity faces numerous challenges. Everyday activities like shaving, eating or bathing suddenly become a struggle. Cheryl Zwerenz, a local OT, says that “the most difficult activity I have come across for upper extremity amputees is hairdressing—it is difficult to get in a ponytail holder or hairclip for girls.” Other activities such as bow hunting, rock climbing or rowing also present challenges.

The original device designed to aid in completing these tasks was the hook. It was primitive at the time, but with some improvement it is still one of the most

functional devices for everyday tasks. But what if someone wants to do more?

A lot of times it means getting creative. I recently worked with a truck driver who had only a partial right hand. He could drive the truck fine on his own, but federal regulations stated that he must use an assistive device while driving. That is not something that can be found in a vendor catalog. With several failed attempts at what we thought were good ideas, we were able to come up with two devices that successfully aided the patient in shifting the gears and steering the truck.

Many of the items available for purchase through vendors were created the same way. There was a task that someone wanted to accomplish and a device was created to meet

Loren's Lines

The current series of the Amazing Race, which airs on CBS, has a contestant that is an above the knee amputee. Although I am not a regular viewer of the show, but I do plan to follow the progress of Sarah Reiner tsen and her partner Peter Harsch. Earlier this year, Sarah became the first female above the knee amputee to complete the Ironman Triathlon in Hawaii. That feat led to her winning the 2006 ESPY award for best female athlete with a disability.



Courtesy: Sarah's website

Since losing her leg at the age of seven due to a birth defect, Sarah has been overcoming obstacles.

She describes herself as being exceptionally competitive. Any time not spent training, Sarah spends travel-

ing around the country giving motivational speeches.

While her competitive achievements are extraordinary, she is also helping the amputee community by bringing a heightened awareness, and encouraging others to conquer challenges that they did not think were attainable.

Everyday, we hear stories of soldiers who are returning to active duty, police and fireman returning to their jobs and athletes who set new records. These heroes prove that we are only limited by what we think we can or cannot do. I applaud them all!

If you want more information about Capitol Orthopedic, visit capitolorthopedic.com.



Adaptive Devices — Continued

the need.

Bob Radocy started the company, TRS Inc., because of his own frustration in meeting his own needs when he became an amputee. He is now considered one of the leading creators of adaptive devices for upper extremity amputees.



TRS Windsurfing Device

His work includes devices for bow hunting, weightlifting, swimming, snow skiing, canoeing, fishing, skip roping, basketball, windsurfing, baseball, infant hands and much more.

There is another company that specializes in quick connect and disconnect tools such as forks, knives, kitchen utensils,



Vegetable Peeler

VP01-0N2

wrenches, fishing rod and several other unique attachments. I am sure that in many offices across the country, prosthetists and occupational therapists have come up with unique and clever solutions for patients needs to achieve new tasks.

Even the myoelectric market is trying to meet more specific needs of upper extremity amputees. Motion Control has created a flexion wrist that allows more movement in more planes of motion for activities such as kayaking.

Great strides are being made to meet the needs and demands of patients who do not want to be told they cannot do something. There is always room for more improvement in the upper extremity field. It is very hard to replicate the movement of the arms and the hands, making it hard to provide a viable means to accomplish tasks that require functional upper extremities.

If there is a downside to the progress that is being made, it is that most of these "extras" are not covered by insurance. This results in additional costs for the patient.