



Veterans' Health

THE WELLNESS MAGAZINE
FOR OHIO VETERANS

SUMMER • 2000

Advancing
The Art Of
Prosthetics

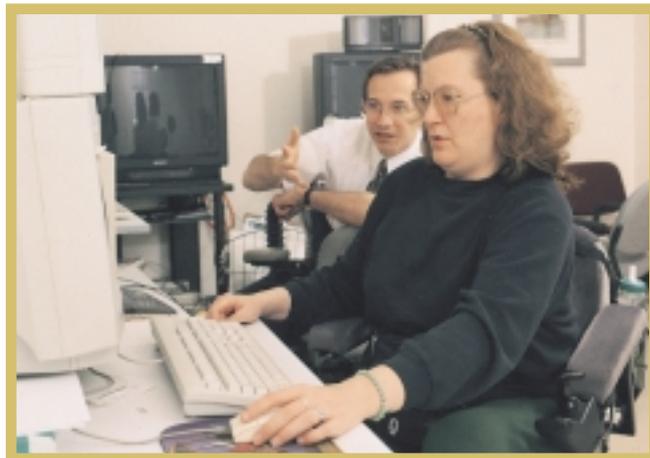
The Brightest
Smile
Brushing basics
and more

Complete
Care, Total
Support
Spinal cord injury
patients benefit
from VA treatment



Comprehensive Care

Christopher Reeve has recently brought spinal cord injury (SCI) into the public arena, but at the VA veterans with SCI have been receiving comprehensive care for decades. Our dedicated staff of healthcare professionals can deal expertly with every phase—from stabilizing a veteran at the moment of injury to teaching him or her how to move from a bed to a chair to helping him or her behind the wheel of a car. We even teach persons with SCI how to use a computer. In this issue of *Veterans' Health*, we offer an inside look at an SCI unit and at the people and programs that make it successful.



Also in this issue, we offer information that can help everyone maintain strong, beautiful teeth. You'll also learn about eligibility for VA dental benefits.

Plus, find out how VA is making strides in prosthetics. We are using the latest technology to help veterans get back on their feet as quickly as possible after losing a limb. VA offers skill and support every step of the way.

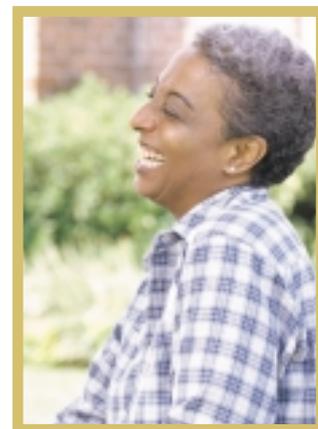
As you enjoy this issue of *Veterans' Health*, don't forget to fill out the postage-paid survey found in the center of the magazine. Your comments, concerns and suggestions are valuable to us.

In the meantime, enjoy a safe and happy summer.

Sincerely,

A handwritten signature in black ink that reads "Laura G. Miller".

—Laura Miller
Network Director



Veterans' Health is published quarterly as a patient education service by VA Healthcare System of Ohio, one of the 22 integrated networks of the Department of Veterans Affairs. The publication is intended to provide information to help you stay well, manage your healthcare and learn about the many health services available through the VA. This publication is not intended as a substitute for professional medical advice, which should be obtained from your doctor. All articles may be reproduced for educational purposes.

The Mission of the VA Healthcare System of Ohio is:

- To provide veterans a continuum of care that is accessible, value-added and cost-effective, and of the highest quality, within an environment of outstanding education and research.
- To promote a culture that supports and develops a caring, compassionate, competent and quality-oriented workforce.

ON THE COVER: Tom Gilliam, an Army veteran based in Germany from 1969–1971, lives in Union, Kentucky, with his wife, Roberta, son, Tommy, and daughter, Tammy. He received his prosthesis at the Cincinnati VA Medical Center.

PHOTOGRAPHER: MARK ARLINGHAUS, MEDICAL MEDIA DEPARTMENT, CINCINNATI CAMPUS; BARBARA BREEN, MEDICAL MEDIA DEPARTMENT, CLEVELAND CAMPUS

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The Brightest Smile

How well do you watch out for your smile? Do you brush once or twice a day and leave it at that? If so, you may be opening yourself up to dental decay and gum disease. You can help protect your smile by following these tips:

Brushing basics. Brush at least twice a day, using a soft-bristled toothbrush and toothpaste that contains fluoride. Clean all surfaces and brush your tongue. Replace your brush every three months.

Floss daily. To floss properly, ease the floss between the teeth and gumline. Form a “C” against the sides of one tooth and rub the floss up and down the tooth, moving from under the gumline to the top of the tooth. If you wear a bridge, floss around the teeth that are right next to it. Brush and floss at bedtime. Ridding your mouth of food

particles before retiring for the night prevents the tooth decay that can occur while you sleep.

Snack smart. Every time you eat a sugary or starchy snack, decay-causing acids launch a 20-minute attack on your teeth. Foods eaten during a meal are less harmful because more saliva is released, helping wash food particles from the mouth. If you enjoy an occasional snack, reach for a small piece of cheese, raw vegetables, plain yogurt or fruit and rinse your mouth with water soon after. **VH**

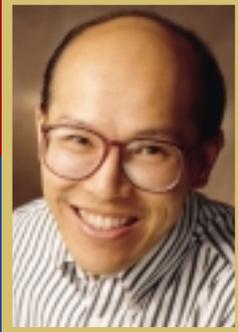
Did You Know?

VA Dentistry has been responsible for several breakthroughs in dental care, such as the development of fluoride rinses and gels, ingestible toothpaste and artificial saliva.

At the Dayton VA Medical Center, oral and maxillofacial surgeon Paul Lambert, D.D.S., Chief, Dental Services, pioneered the use of hyperbaric oxygen treatments for some patients requiring oral or reconstructive surgery. The treatments supply the body with pure oxygen, which promotes proper wound healing and speeds recovery after surgery. The oxygen treatments are especially beneficial for patients with oral cancer.

Who Is Eligible For VA Outpatient Dental Benefits?

- Veterans who have a service-connected compensable dental disability or condition.
- Veterans who were former prisoners of war for 90 days or more and those whose service-connected disabilities have been rated at 100 percent. (Includes veterans with temporary ratings of 100 percent for duration of that rating.)
- Veterans participating in a VA rehabilitation program are eligible for dental care necessary to complete their program.
- Veterans having a service-connected noncompensable dental condition or disability may receive one-time treatment if it can be shown to have existed at the time of discharge or release from active duty of at least 180 days and application is made within 90 days of separation from active duty.
- Veterans having a service-connected noncompensable dental condition or disability resulting from combat wounds or service trauma are eligible for repeat care for the service-connected condition(s).
- Veterans having a dental condition clinically determined by the VA to be currently aggravating a service-connected medical condition are eligible for dental care to resolve the problem.
- Veterans receiving inpatient care may receive dental care if the dental condition is clinically determined to be complicating a medical condition currently under treatment.



Complete Care, Total Support

VA offers people with spinal cord injury the resources they need to resume a full life.

A fall. A car accident. A gunshot wound. In a split second, an able-bodied person can sustain a spinal cord injury that leaves him or her unable to walk again. Sometimes, complete or partial paralysis occurs as a result of a tumor of the spine or a progressive

neurological illness, such as multiple sclerosis.

Whatever the reason for paralysis, the Cleveland VA Medical Center's Spinal Cord Injury Unit (SCIU) offers comprehensive, compassionate care that helps a veteran adjust to a new way of life.

Skin-Care Basics

People with spinal cord injuries must focus on some things that many of us take for granted, such as knowing with just a touch that a cup of coffee is too hot to rest on your knee. While seated, people without SCI instinctively wiggle in their seats; people with SCI must make a concerted effort to do so. Not paying attention to such ordinary things can lead to burns, wounds and pressure ulcers (sores that result from constant friction or pressure). A simple skin tear or blister in a person with SCI can easily develop into a full-blown pressure ulcer, the complications of which include infection and loss of a limb.

To avoid pressure ulcers, people with SCI must examine their skin carefully for red patches, check bed linens for wrinkles, turn in bed and regularly lift their body weight when seated. Weight control and proper nutrition are also important to maintain healthy skin.

Healing a pressure sore involves removing pressure from the site and keeping the area clean and dry. In some cases, surgery may be necessary. It may take about a month after surgery to gradually work up to putting pressure on the site again.



“Most people with new spinal cord injuries are trying to deal with the loss,” says Dorothy Torrence, M.S., R.N., Director of Operations, SCIU. “They may have difficulty accepting the fact that they will never walk again. Sometimes they think they don’t need what we have to offer. The family is affected, too—often, they may feel guilty because they are still walking around.”

These sensitive issues, as well as a patient’s overall rehabilitation, are thoroughly addressed

by VA’s interdisciplinary approach to SCI care. Physiatrists (M.D.s who specialize in physical rehabilitation), psychologists, dietitians, physical therapists, kinesiologists, occupational

Avoiding Injury

Using commonsense safety practices and wearing appropriate protective equipment during work and leisure activities can go a long way toward preventing spinal cord injuries. Remember not to drink alcohol before or while driving a motor vehicle, operating heavy machinery or participating in physical activities.



Veteran Daryl McCauley, a member of the Ohio Buckeye wheelchair team, builds upper body strength during a physical therapy session.

al therapists, recreational therapists and rehabilitation nurses all play a pivotal role in a patient's physical and emotional recovery.

From the moment a spinal cord injury patient is admitted, the team assesses his or her injury. Together with the patient, they establish rehabilitation goals that are reevaluated on a weekly basis. "We are able to predict goals based on the level of spinal cord injury," says Torrence. "Over the weeks, we slowly work toward those goals, making necessary adjustments along the way. Sometimes we realize that a patient has greater potential; other times, less."

The average length of stay for people with SCI is six to eight weeks, says Torrence. During that time a lot of learning and hard physical and emotional work take place.

A psychologist works one-on-one with the patient, helping him or her go through what is essentially a grieving process. The aim is to help a person accept the change and move forward.

Because proper nutrition is critical at this time, a dietitian develops a balanced meal plan that respects a patient's individual preferences and special dietary needs.

The target of physical therapy is to build a patient's strength. He or she will rely on that extra strength to move from a wheelchair to a bed, the car or the toilet, for example. Occupational therapists teach patients how to get dressed, feed themselves and attend to other activities of daily living. Kinesiotherapists work to

maintain joint range of motion and physical conditioning of people with SCI. They also teach veterans how to drive a car using hand controls.

Any needed equipment such as wheelchairs, seat cushions, catheters, braces and grabbing devices are provided by the Prosthetics Service department.

To help people with spinal cord injuries get used to

being out in public in a new way, recreational therapists plan leisure events, such as trips to the mall, the movie theater or a ballgame. The goal is to help a person with SCI feel comfortable with everyday tasks, such as finding appropriate seating, paying for a ticket or even asking others for help.

During their rehabilitation, SCI patients are also trained to use a computer. "Those without the use of their hands can use a voice-

continued on next page

People With SCI: Watch For This Common Complication

Autonomic dysreflexia is a life-threatening complication of spinal cord injury. Especially susceptible are patients with tetraplegia (paralysis from the neck down).

A full bowel or full bladder generally triggers this serious condition. Autonomic dysreflexia causes blood pressure to skyrocket as high as 250/150 mm Hg, which can lead to stroke. Other symptoms are a pounding headache and flushing of the skin. This is an emergency situation that requires prompt medical treatment.

Taking Control

Ten summers ago, then-30-year-old Holly Koester was in Alabama preparing for Desert Storm at the Redstone Arsenal in Alabama. Called on base for alert, she had a car accident on the way that left her paralyzed from the waist down.

Wanting to be near her during the months ahead, Holly's family chose the Cleveland VA Medical Center for her rehabilitation. Besides being a relatively short three-hour drive from their Buffalo home, the center could offer Holly top-notch care.

Although her rehabilitation proceeded well, Holly felt increasingly frustrated and depressed by the loss of bladder control following her injury. The use of catheters was a major inconvenience and Holly was enduring monthly urinary tract infections.

"A lot of people think people with spinal cord injuries just lose use of their arms and legs. They forget that we also lose control of bodily functions other people take for granted," says Holly, a Walton Hills, Ohio, resident.

Her doctors thought she was an ideal candidate for the Vocare Bladder Control System, which relies on a technology called functional electrical stimulation. The system consists of an implantable receiver stimulator that is surgically implanted under the skin of the abdomen. Wires from the pacemaker-like device lead to tiny electrodes implanted near the spinal nerves that control the bladder. When activated by a small battery-operated



A bladder control system frees Holly Koester to enjoy wheelchair racing.

external transmitter, the implant sends electrical signals that stimulate bladder contractions and allow the controlled release of urine. The system can also improve bowel control.

Since receiving the system seven years ago, Holly, a schoolteacher, says she feels like a "regular person."

"I'm continent now and rarely have bladder infections," she says. "Before the surgery, I was constantly worried that I would have an accident. The system has built my confidence and self-esteem." What's more, it has freed Holly to enjoy wheelchair racing, a passion of hers for the last five years.

Mary Jane Kachourbos, a research nurse who has been working with Graham Creasey, M.D., principal investigator of the Cleveland VAMC clinical trials of the system, points out an added benefit of Vocare: "It helps persons with spinal cord injury cut down on supplies such as catheters and medications needed to control leaking and cure frequent bladder infections," she says. The system received FDA approval in December 1998 for people with complete spinal cord injury and further research is ongoing for people with partial spinal cord injuries.

Other veterans with spinal cord injuries who are interested in learning more about the Vocare Bladder and Bowel Control System can contact Kachourbos at 216-791-3801.

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activated program," says Torrence.

Throughout the process, rehabilitation nurses work closely with the patient to reinforce what has been learned in physical and occupational therapy. "As the primary educators of the patient and the family, they work with SCI patients on a 24-hour basis, helping them practice new skills," says Torrence.

Before a person with SCI goes home, a social worker links him or her with appropriate financial and community services, including

vocational rehabilitation services. Community health nurses arrange for home health care in collaboration with the social worker, and the patient's home is evaluated to make sure it can accommodate his or her new needs.

"We care for the whole person," says Torrence. "Their emotional, physical and practical needs are our ongoing concern." Certainly, the skill, dedication and compassion of the SCI team benefits and comforts patients who must relearn the rules of life, day by day. **VH**

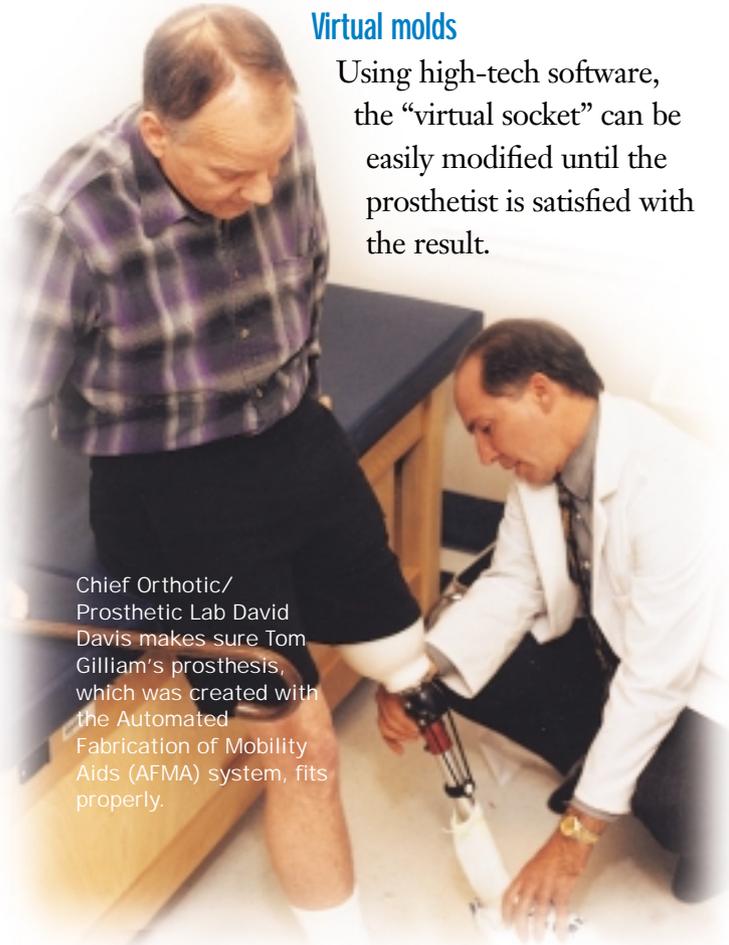
Before the VA acquired the Automated Fabrication of Mobility Aids (AFMA) system, veterans might have had to wait several weeks for delivery of their prosthesis. Today, thanks to computer aided design—computer aided manufacturing technology, final fitting may take place in as little as one week.

How it works

A cast is taken of the patient's residual limb or stump and is then "digitized" to create a computer-generated model of the leg. During the casting process, various bones and tendons are highlighted by the prosthetist. These "landmarks" are used to create the computer model. This virtual image is then used to create the socket for the prosthesis.

Virtual molds

Using high-tech software, the "virtual socket" can be easily modified until the prosthetist is satisfied with the result.



Chief Orthotic/Prosthetic Lab David Davis makes sure Tom Gilliam's prosthesis, which was created with the Automated Fabrication of Mobility Aids (AFMA) system, fits properly.

Advancing The Art Of Prosthetics

The real thing

The next step is fabrication of the check socket. The clinicians, Orthotist/Prosthetist Anthony Flanagan and Chief Orthotic/Prosthetic Lab David Davis, use the check socket to make sure that the design provides the best fit possible. says Davis.

Using this technology, Flanagan and Davis can create a check socket in as little as two hours. "We try to schedule the casting around our patients' other hospital appointments so that the test socket can be fabricated and ready to fit in the same visit," says Flanagan.

When the prosthetist is satisfied that the socket design is adequate, the computer data is transmitted to the AFMA milling machine, or carver, that produces a three-dimensional mold of rigid foam. The mold is transferred to the AFMA Thermoformer, which then vacuum-forms various thermoplastics to become the actual socket. Other parts, including the foot and pylon, are attached to create the prosthesis. After a series of alignment procedures, the prosthesis is ready for final fitting.

Because AFMA deals in virtual imaging, patients can be seen at nearby VA facilities throughout VISN 10. Currently, Cincinnati VAMC, Cleveland VAMC and Dayton VAMC have full-service Orthotic/Prosthetic Labs with a fourth lab scheduled to open in the Columbus/Chillicothe area this fall.

Rehabilitation

Once a patient is fitted with his or her prosthesis, gait training is provided by physical therapists in the Physical Medicine and Rehabilitation Department generally on an outpatient basis.

For more information about AFMA or about assistance offered through Prosthetics and Sensory Aids Service, call the VA Medical Center nearest you (see back cover for phone numbers). **VH**

Reaching Us Is Easy

Keep this information handy—when you need us, we'll be there.

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Akron, OH 44311
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Athens VA Campus

510 West Union Street
Athens, OH 45701
740-593-7314

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Bellevue, KY 41073
606-392-3840

Brecksville VA Campus

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Brecksville, OH 44141
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Canton VA Campus

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Canton, OH 44702
330-489-4600

Chillicothe VA Campus

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740-773-1141

Cincinnati VA Campus

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Cincinnati, OH 45220
513-861-3100

Columbus VA Campus

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Columbus, OH 43203
614-257-5200

Dayton VA Campus

4100 West Third Street
Dayton, OH 45428
937-268-6511

Ft. Thomas VA Campus

1000 So. Ft. Thomas Avenue
Ft. Thomas, KY 41075
606-572-6202

Lancaster VA Campus

1550 Sheridan Drive
Colonnade Medical Building
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740-653-6145

Lima Campus

1220 E. Elm St.
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419-227-9676

Lorain VA Campus

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440-244-3833

Mansfield VA Campus

1456 Park Avenue West
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Mansfield, OH 44906
419-529-4602

McCafferty VA Campus

4242 Lorain Avenue
Cleveland, OH 44113
216-939-0699

Middletown VA Campus

675 North University Blvd.
Middletown, OH 45042
513-423-8387

Call Tele-Nurse



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Portsmouth VA Campus

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Sandusky VA Campus

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Springfield VA Campus

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Wade Park VA Campus

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Youngstown VA Campus

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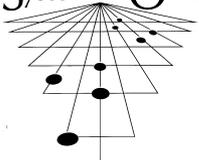
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