ISSUE
01
WINTER 2008

Tamarack HABILITATION TECHNOLOGIES, INC. designer

Orthotics & Prosthetics Newsletter
of Tamarack Habilitation Technologies

this issue

Creative Uses of Tamarack Products

If you have Creative Uses for friction management materials such as ShearBan®, or any other Tamarack product, we are interested in hearing about them! We will pay you an honorarium and give you full credit if/when your submission is selected and published on our website or in our newsletter.

In this first issue of the "Tamarack Designer" we are excited to begin highlighting case examples shared by guest Prosthetists, Orthotists, Pedorthists, and other allied healthcare professionals. Our first guest, Charles Kuffel, CPO, FAAOP, is the President and Clinical Director for Arise Orthotics and Prosthetics in Blaine, Minnesota. Thanks, Charlie, for sharing your experience and insights with your fellow professionals through the "Tamarack Designer".

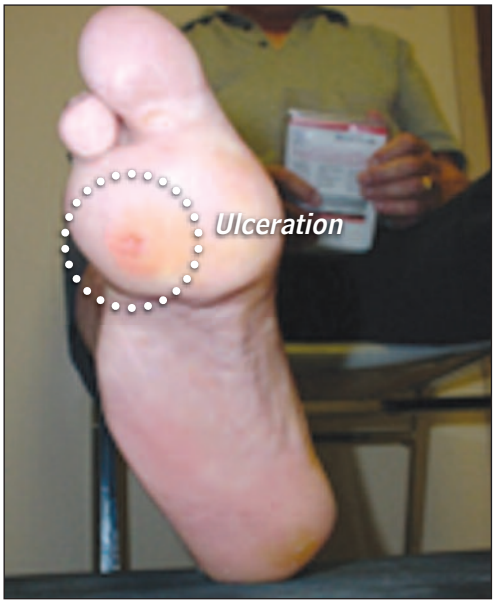
Mark Payette, CO
Tamarack Habilitation Technologies

Case Study #1

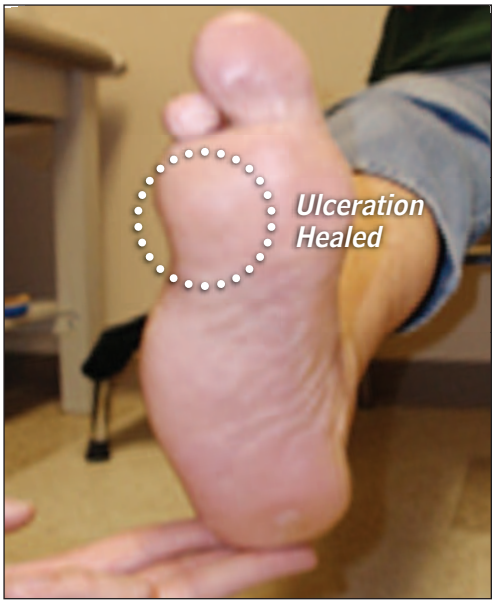
Submitted by:
Charles Kuffel CPO, FAAOP • President/Clinical Director
Arise Orthotics and Prosthetics, Inc. • Blaine, Minnesota (763) 755-9500 • www.arise-op.com

Case Report: This case highlights the use of Friction Management Techniques using ShearBan®
(Summary version – see full version of this case at tamarackhti.com – click on "case studies")

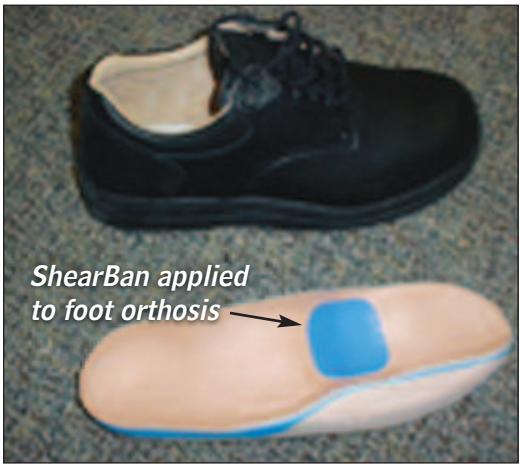
Patient Demographics: 67 yr. male with Type II Diabetes, ulcers, ray amputations



AT 1ST CONSULTATION



AFTER 11 WEEKS OF TREATMENT



COMPREHENSIVE ORTHOTIC TREATMENT

Results:
Mr. X was seen for follow-up of orthotic management every two weeks after the initial visit, and remained compliant wearing his shoes and inserts full time. Over the course of 11 weeks of treatment (6 office visits) the ulcer healed completely, and as of this writing, he remains ulcer-free for an additional 20 weeks.

Tamarack
HABILITATION TECHNOLOGIES, INC.

John Lampe Named New Tamarack President

John Lampe has been appointed President of Tamarack Habilitation Technologies, Inc. effective October 1, 2008. Mr. Lampe is a graduate of Carleton College in Northfield, Minnesota . He has a law degree from the University of Minnesota and served as an Assistant Attorney General for the State of Minnesota.

Marty Carlson, CPO, FAAOP, Tamarack's founder and past President, will focus on the science, technology and education functions of the company. He will continue as principal owner and board chairman.

Tamarack Grows to New Heights

By Marty Carlson

Dear Colleagues,

This little newsletter is meant for orthotists, prosthetists, pedorthists and the technicians with whom they work. Some of you may remember our original newsletter, The Tamarack Designer, from the late 90's. Since then, there have been many developments here, but we're still having fun trying to perfect new, innovative solutions that help solve both clinical and fabrication challenges. My own role at Tamarack is becoming less managerial, more focused on science and technology. I am also spending more time at home on the farm.

To make these changes possible, John Lampe took my place as Tamarack's President on October 1st of this year. John's brief bio sketch and promotion announcement appeared in recent industry publications. His bio sketch also appears in this newsletter. John brings an additional business perspective to Tamarack. His priorities and values are consistent with our heritage and mission. We have great expectations with John for the future of Tamarack!

I and my wife Peggy, intend to continue to own and nurture Tamarack. I look forward to seeing our most innovative technologies and products "break through" to much wider applications in current and new markets!!

We intend for this newsletter to accomplish a few different things – it will solicit from all of you, creative solutions which will be shared on these pages, with your colleagues. It will bring attention to research papers from journals you may not ordinarily peruse: research pertinent to orthotic, prosthetic & pedorthic science and service. This newsletter will also, of course, bring you information and perspectives on Tamarack products.

Enjoy!

Marty Carlson CPO

Update your Tamarack Contact Information

Earlier this year, Tamarack launched an all-new website and company-wide email system. Be sure to update your records…

MAIN CONTACT INFORMATION

We're available Monday through Friday from 8:00 am until 4:30 pm CST to answer any questions you may have about Tamarack products & services.

Telephone: (763) 795-0057

Toll-Free: (866) 795-0058

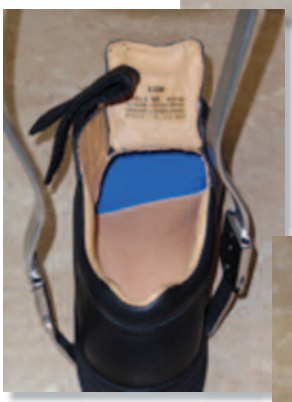
Fax: (763) 795-0058

Email: info@tamarackhti.com

Website: www.tamarackhti.com

Creative Solution to Donning A Solid AFO

Submitted by:
Charles Kuffel CPO, FAAOP
President/Clinical Director
Arise Orthotics and Prosthetics, Inc.
11855 Ulysses St. NE #230
Blaine, Minnesota 55434
(763) 755-9500
www.arise-op.com



A common problem that I see when clinically managing orthotic patients, is the difficulty they experience when attempting to slip their foot into either a thermoplastic AFO or a shoe when attached to a conventional AFO.

I have found that applying ShearBan® to the metatarsal area (approx. 6 sq.in. of material) makes it very easy for the patient to slip his/her foot into the AFO or shoe. This is especially beneficial with metal and leather type AFOs, since polypropylene has a relatively lower Coefficient of Friction (dry) against stocking materials compared to insole materials.

Incorporating the ShearBan® patch is a simple and beneficial modification that makes the donning experience easier for the patient. It also helps prevent problems with stockings being pulled tightly against the toes, or worse, having the toes buckle into flexion during donning. In that event, if the patient has insensate feet, they may wear the AFO with disastrous outcomes.

In sum, the use of ShearBan® has proven to be an effective and preventative mechanism when used in this and other treatment plans for orthotic management.

Resources To Expand Your Knowledge

A Review of "The Diabetic Foot"

Mroczek K, Review of Bowker JH, Pfeifer Ma, eds. Levin and O'Neal's The Diabetic Foot. St Louis, Mo: Mosby; 2008: 33-74 in JAMA, 2008; 299(20): 2448-2449.

Excerpt from review:

"The seventh edition of *Levin and O'Neal's The Diabetic Foot* continues the tradition of providing a comprehensive review for clinicians involved in the foot care of persons with diabetes and its complications. It is updated with new information pertinent to providing superior care and is highly recommended."

Recommended Reading

"Temporal characteristics of plantar shear distribution: Relevance to diabetic patients"

Yavuz M, Tajaddini A, Botek G, Davis BL – J Biomech 41:556-559, 2008

Excerpt from abstract: "Diabetic foot ulcers are known to have a biomechanical etiology…Plantar shear is known to be a factor in callus formation and has previously been associated with higher ulcer incidence. During gait, shear stresses are induced with twice the frequency of pressure characteristically. Therefore, plantar shear should be investigated further…"

Article Review: A Practitioner's Viewpoint

By Marty Carlson, CPO FAAOP

Friction is the primal factor in generating shear stress in and near the skin layers. That stimulates callus formation and, when more intense, causes blisters, abrasions, and ulcers. These basics have been known by researchers and in the scientific literature for more than 50 years (see article Functional Limitations from Pain…– JPO Fall 2006). Long distance runners and a range of professional athletes use a Tamarack product similar to ShearBan® to prevent excessive callusing and blisters. Very few orthotists, prosthetists and pedorthists have adopted this technology. This last fact is actually tragic when we consider the friction-induced consequences our patients suffer within and near the skin. Chief among those are people with diabetes and other conditions leading to peripheral neuropathy.

After fifty years of awareness that friction/shear is a factor, we, as conscientious individual practitioners, need to be doing the things that reduce this factor and observing the results. We need to verify for ourselves what a slowly growing number of our fellow practitioners are reporting anecdotally:

- Friction reduction in hypercallusing areas reduces the rate of callus formation (less need for trimming, less cracking, less sub-callus ulcer generation)
- Reducing friction in painful, sensate areas is often the easiest and most effective way to make our patients more comfortable and functional

Professional Development Opportunities

It's not too early to make your plans for the 35th Academy Annual Meeting & Scientific Symposium

March 4-7, 2009
Atlanta, Georgia

We hope to see you there!

PILOT ISSUE: To continue receiving The Tamarack Designer, please visit www.tamarackhti.com to register for future newsletters.

Help us save trees by sharing your copy with a co-worker.

Tamarack
HABILITATION TECHNOLOGIES, INC.

1670-94th Lane NE
Blaine, MN 55449-4323

www.tamarackhti.com