VIKINGS DISEASE - DUPUYTRENS DISEASE

A REVOLUTIONARY TREATMENT

Vikings disease is a condition that existed long before the medical name of Dupuytrens (Du puh trons) disease (DD) was applied to it. As the Viking marauder/colonizers intermarried, they spread a malady frequently affecting their hands and subsequently the hands of their offspring, contractures.

Although long considered wild, merciless robbers and raiders, the Vikings more commonly were farmers, traders and aggressive colonizers. Periodically, Viking expeditions were other than peaceful; some degenerated to looting while others were purposeful expeditions for pillaging and colonizing coastal regions. As colonizers, they spread westward from Norway, Denmark and Sweden to Newfoundland, southward to countries bordering the North Sea, northern Europe to the Mediterranean and its many ports, eastward toward the Caspian Sea and Russia. Their affliction, the Vikings disease, followed them and spread among their progeny. The disorder persists and is found most commonly in those of northern European descent today.

The contracture, although recognized for centuries, went universally unnamed. In 15th century Scotland, male bagpipers who were unable to finger the pipes due to contractures were said to have “the curse of the MacCrimmons,” the Viking disease. Guillame Dupuytren, a French surgeon, described the condition medically and anatomically in 1831; thereafter it was identified by his name.

DD was (and is) manifest by an initial, sometimes tender, lump or nodule in the palm. Often, a coarsening of skin and thickening of subcutaneous tissues, the palmar fascia, follows. This

continued on page 3
Dear Perry,

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I love it on lateral epicondylitis when the supinator is involved. The gentle heat produced is warming and calming for the patient as I work the muscles followed by a nice stretch. Muscles involved in radial tunnel are tender and Prossage Heat allows me total control of targeted muscles without slippage. I have also found Distal Biceps repairs to benefit greatly from PROSSAGE Heat due to the deep nature of the repair and the location of the incisions.

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Thank you for developing such a “hand saver” of a product... it is not only welcoming to the client/patient it is appreciated by the therapist. In fact, our clinic had to order multiple bottles of the largest available size so we all can utilize this great product. Again, thanks for making my job easier.

Nancy Falkenstein
Nancy Falkenstein, OTR/L, CHT, CEES

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thickening may cause cutaneous attachment of the palmar fascia to the skin and result in dimpling. Subcutaneous bands also may form in the palmar fascia. If the bands attach to the fingers and then contract, the shortening leads to a persistent flexion deformity of the fingers. The condition is then referred to as a Dupuytren's contracture (DC). The contracture most commonly and initially affects the MCP joint of the little and ring fingers.

DD often is inherited as the result of an autosomal dominant trait with varying degrees of expression. In others, there is no familial connection. Although it is much more common in those of northern European descent, particularly those of Scottish or Swedish ancestry, DD may occur in any race or heritage. It is also associated with certain diseases such as diabetes, epilepsy, alcoholism, heart and liver disease and with smoking. 30-40% of diabetics have some early or late manifestation of DC. Interestingly, in diabetics, the little finger is usually spared but there is a much greater incidence of involvement of the long finger.

There is no known malignant degeneration.

TREATMENT

STANDARD: (usually surgical) Early cases of DD and DC have been without effective treatment. Non-surgical treatments such as radiation, allopurinal, dimethylsulfoxide, injections, manipulation and stretching have not been effectual. Investigational use of Clostridial collagenase was apparently successful but then the research was suspended. The use of collagenase breaks down the main component of the offending bands, collagen. Research has resumed at the State University of New York.

Note the DD and DC of the long finger with MPJ contracture, rendering simple ADLs difficult.

In the Spotlight!

Continued on page 5

Laurie Rogers OTR/L, CHT

A: I work for National Rehabilitation Hospital in one of their freestanding clinics. I’m the only OT/ hand person amongst several PT’s who treat a variety of diagnoses.

Q: How long have you been doing hand therapy?

A: Gulp…. 16 years. I chose hand therapy as one of my clinicals during school and fell in love with it. After graduating, I always sought out jobs where I could learn from a mentor and treat hand patients along with other diagnosis. Slowly over the years hand therapy has become all I treat.

Q: What is your favorite diagnosis and why?

A: How can I pick! Probably elbow injuries including fractures. One of the hand surgeons I work with is known as the “elbow doc” and so these patients trickle down to me. I love the elbow diagnosis because treatment is never straightforward or “cookbook”, but treating the elbow requires lots of creative thinking.

Q: What do you find is the most challenging diagnosis you treat?

A: Nerve compressions – carpal tunnel, cubital tunnel, etc. I always find it challenging to convince patients that they have to make significant lifestyle changes. For instance, taking a

Continued on page 6
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and is now in Phase 3, of a randomized placebo study. In the interim, surgeons generally recommend no treatment until the disease has progressed to an advanced stage.

Advanced cases of DC are treated with open surgery wherein the tissue immediately beneath the skin of the palm, and often the fingers, is removed, with a “fasciectomy”. This may be limited, regional or radical depending on the amount of aponeurotic tissue removed. If thickened skin is tightly adhered to underlying tissue, a “Dermofasciectomy” may be performed removing both skin and offending aponeurosis. The offending thickened tissue is meticulously excised through zig zag or Y incisions into the fingers and palm. Skin closure often is difficult, sometimes necessitating a free graft, other times left open to granulate (McCash procedure). Regaining finger flexion is painful and slow. The procedure, done in a hospital setting, is painful, is often associated with complications and requires months of difficult and often painful rehabilitation. Recurrence rate is 30-50% after five years.

Repeat open surgery is usually more difficult than the initial. The cost is 20-30 thousand dollars.

REVOLUTIONARY: (medical)

Spreading quite rapidly throughout Europe, but still very rare in the United States, is the needle aponeurotomy, needle fasciotomy or needle release (NR). This procedure, medical rather than surgical, was developed in the 1970s, reported and popularized in the late 80’s and early 90’s by French rheumatologists, Drs. Badois, Lermusiaux and Debeyre.
break from the computer, sleeping with splints, exercise etc. This is especially challenging with a population that is largely lawyers, CEO's, who want easy and instant cures!

Q: What areas of hand and upper extremity rehabilitation do you want to expand your expertise?

A: Taping! It seems like a great way to treat edema, tendonitis, etc.

Q: What accomplishments would you like to share with the hand therapy community?

A: Being in your spotlight section!

Q: What do you do for fun when you are not busy in your hand clinic?

A: I’ve become addicted to scrapbooking, or at least buying all the fun supplies.

Q: Do you have an area of clinical expertise that you can share with us such as a tip or trick that we can try in our clinical practice?

A: I don’t remember where I picked up this trick, but whenever I make a thumb spica splint I wrap the proximal phalanx with several layers of coban. This helps to prevent the splint from being to tight (too many times for me it got stuck..embarrassing) and makes it slip off easily.

Laurie, thank you for being our star in this quarter of our magazine!

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In The WEB

- Below is the website of our author featured in this magazine Terrence Barry MD http://www.terrencebarrymd.com/
- This site is also listed in our feature article. It is a very good site with great information. http://assoc.orange.fr/f.badois-dupuytren/html/gbsommaire.html
- Here is a site with some fantastic Needle Aponeurotomy photos. http://www.nvo.com/plasticsurgerys/scrapbook/
- Dr. Eaton is a Florida hand surgeon & he also specializes in the NR procedure Here is his website and info: http://www.handcenter.org/newfile16.htm?gclid=CIO8sNS3_4gCFRI9UAod8nkfSQ
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Update on the Therapy Cap from the AOTA website:

On December 7, 2006, after significant lobbying efforts by the American Occupational Therapy Association (AOTA), the therapy community, and other stakeholders, the therapy cap exception process was extended to apply from January 1, 2007-December 31, 2007, through a provision in H.R. 6111, the Tax Relief and Health Care Act of 2006. This law also will have a positive affect on the rate amounts.

Following up on the legislative victory in extending the cap exemptions process and avoiding a scheduled 5% cut in the Medicare payment schedule, AOTA is championing the unique nature of occupational therapy to ensure that the Centers for Medicare and Medicaid Services (CMS) does not restrain or limit practice inappropriately and that occupational therapy is fully recognized in new quality and payment procedures.


Update On Quality Standards Info complied from AOTA, NBAOS, & CMS websites

The Medicare Modernization Act of 2003 developed new quality standards for DMEPOS suppliers under Medicare Part B that require therapists who supply orthotic devices to Medicare beneficiaries to obtain specific DME accreditation.

The Centers for Medicare & Medicaid Services has announced the names of 11 accreditation organizations that will accredit national suppliers of durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) for new quality standards under Medicare Part B.

The following organizations have received authority to accredit DMEPOS suppliers seeking to participate in the Medicare program:

- Joint Commission on Accreditation of Healthcare Organizations
- Community Health Accreditation Program
- Healthcare Quality Association on Accreditation
- National Board of Accreditation for Orthotic Suppliers

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In addition to the counter-irritant ingredients found in all topical analgesics creams, TheraFlex™ RSI possesses unique components that markedly enhance its efficacy. By targeting the body’s natural anti-inflammatory enzyme systems, TheraFlex™ RSI induces and activates components within the body that aid in reducing pain and that promote tissue healing. Such enzymes are central to the control of inflammation, pain, swelling, stiffness, redness, etc. TheraFlex™ RSI further incorporates natural transdermal carriers, therapeutic levels of minerals, herbs and specialized aminio acids to reduce muscle fatigue and stress.

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This medical solution to a “surgical” problem has met with some resistance. The British Hand Society, however, produced a very favorable report in 2003. NR as yet is virtually unknown in the United States since it has had only a limited introduction in the last two or three years.

The NR is usually performed in the doctor’s office. A local anesthetic is injected using a small (25G) needle. Using the sharp-edged bevel of the needle used for the injection, the subcutaneous or fascial contractures are transected and/or lengthened by sawing and perforating motions of the needle. Resistance from the cord is usually felt and the sensation is quite easily recognized. Extending the finger until a characteristic snap is felt or heard may complete total rupture of the band. Correction is immediate.

Post procedure discomfort, if any, rarely requires analgesics. If there is PIP joint involvement a night use orthosis may be required for three months. Recurrence rate is 30-50% after five years. Repeat NR is easily performed. The cost is 500-1200 dollars.

WHO IS A CANDIDATE?

All DD and DC patients should be seen and evaluated for this revolutionary NR procedure. Certainly those who fail the “table top test” (with the hand flat on a table, unable to lift a finger from the surface) are candidates for NR. Many who have “stiffness” or “tightness” and often night pain in their hands from offending palmar bands that do not meet the “table top” requirement, will also benefit from a NR.

Those who have advanced contractures with the fingers all the way down into the palm are better candidates for open surgery. Additionally, patients who have already had previous open surgery and are left with thin skin adherent to the bands are also best to have repeated open surgery. The earlier a patient receives the treatment, the better the results. We encourage practitioners to learn and use this revolutionary NR technique. At the time of this writing, only six practitioners in the United States have been trained in this procedure. The names of those trained are included in the French website referred to earlier. This number of practitioners should increase as NR becomes better known.

Dr. Terrence J. Barry is board certified in orthopedic surgery which encompasses hand surgery. He is a Diplomate of the National Board of Medical Examiners, a Diplomate of the American Academy of Orthopedic Surgeons and a Fellow in the American Academy of Orthopedic Surgeons.

Dr. Barry earned his bachelor’s degree from Harvard College in Cambridge, Massachusetts and his medical degree from Cornell University at the Cornell University Medical College in New York City. His post graduate training included an internship.
and general surgical residency at University Hospitals of Cleveland Ohio, associated with Case Western Reserve University. He completed his orthopedic residency training and was a Fellow in Orthopedic Surgery at the New York Orthopedic Hospital, Columbia Presbyterian Medical Center affiliated with the Columbia College of Physicians and Surgeons. He has been serving south east Florida in a successful orthopedic practice for over 30 years.

Dr. Barry recently completed further training in the non-surgical treatment of Dupuytren’s contractures in Paris, France, by Drs. Lermusiaux and Badois, the originators and developers of the non-surgical needle aponeurotomy technique.

Dr. Barry served four years in the United States Air Force as a jet fighter pilot. He is married with four children and fifteen grandchildren.

For further information visit: www.terrencebarrymd.com

Exploring Hand Therapy would like to thank Dr. Barry for sharing his expertise with us. Duypuytren’s Disease is a fascinating disease and it is exciting to learn alternative treatments to surgical intervention.

In the Web on page 13, has some great websites to learn more about Dupuytren’s & treatments.

On page 15, Susan Weiss shares with us her therapy protocols.
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Therapy Corner

Let’s Shake on It

When a patient walks in after a Duputren’s contracture traditional surgical release I say… “can I shake your hand” (gently of course) and I get a big warm smile. My response is… “don’t you LOVE it!” I continue with… “now you can put your hand in your pocket with ease and wash your face without poking your eye!” From that point on I have a friend. O.K they are my friend until I start pushing on their fingers and blood is oozing down their hand. Alright, maybe just a popped stitch or two and then they believe I mean business.

 Seriously, after Dupuytren’s surgical release early motion is a must. I let them know it is not unusual to have some bleeding or a popped stitch as they frequently have had a lot of tension on the tissues to get their fingers back into extension. This is especially true if no grafting was done on a finger that has been contracted to their palm for years. It is helpful if you see a patient before surgery so you can review the therapy plan as well as note the amount of contracture. Photo shoots are a great way to show progress. If you didn’t have the opportunity to talk to your patient pre-op, during your history (post-op) you should determine the approximate level of contracture they had pre-op. You may even be able look at the opposite hand for comparison, especially, if it did not have previous surgery.

Most of the time, we see patients very early (1-3 days) after surgery to change the post-operative dressing and begin ROM. We often fabricate a static splint for night wear to hold the digit in the amount of ext. that the

Continued on page 15
doctor was able to achieve in surgery. It is important to note that some physicians do not want splints fabricated at all and some physicians require patients use splints day and night. While others leave that decision to the therapist.

The following is a generalized therapy intervention program after surgical intervention is utilized.

**Week 1**

Splint is usually made on the first or second visit post op. As I mentioned splinting regimes will vary depending on the physicians protocol as well as what joints are affected. Some therapists will apply a dorsal splint and others apply a volar splint. Some apply splints that are hand based and others apply forearm based splints. Some only apply splints if the PIPJ was corrected and not the MPJ. Splint wearing schedule is then established and reviewed with the patient. Wound care is performed and appropriate wound dressings are then applied. The patient is instructed in how they will manage the wounds. The patient is educated in edema control using elevation and AROM. Additionally, TENS is sometimes employed for pain and edema management. ROM exercises are performed hourly to prevent joint stiffness and to regain full ROM in all the digits. ROM exercises should include gentle flexion and extension of the wrist and fingers and gentle passive finger flexion and extension as tolerated. The therapist needs to watch out for early flare reaction (this can lead to CRPS/RSD) which may occur.
“Consulting to industry” took on an entirely new meaning for me recently. At 7:30 one evening I returned a phone call to a producer’s assistant charged with the task of locating a hand therapy video for Jim Carrey. He explained that Jim was researching his role as a hand-injured character in his upcoming movie The Number 23. Though I was unaware of the existence of any hand exercise videos, I referred him to Exploring Hand Therapy, and offered my assistance. Exploring Hand Therapy immediately provided the producer with several online videos to help them begin the journey I will share with you.

A few phone calls later, I was being urged to come on the set the following day, to speak with Jim directly. YES! I was ecstatic in anticipation of telling my teenage kids the news. “We don’t have any specifics about the injury yet, but you might want to bring some props to use in a scene with Jim and his therapist.”

But my excitement dissolved as details continued to emerge: There was to be a head injury as well, and I would be expected to advise Jim on gait training in addition to hand therapy. I clarified that my skills as an OT did not include gait training. Ultimately, he was very sorry that I re-arranged my patient schedule and that it wouldn’t work out.

Continued on page 18
All About Straps:

- Apply straps in an oblique direction to accommodate the conical shape of the forearm trough. This will prevent the strap from digging into the skin.
- Position straps so the patient can easily reach the Velcro.
- Instruct patient to apply the closing end of the strap away from the body to allow visual inspection of the closure to ensure the Velcro hooks do not catch on clothing and other material. It is ideal to have the Velcro hook completely covered by the Velcro loop.
- If the strap closure is used for positioning then the direction of closure is important. For example, if the MP joints require extension and simultaneous realignment, the straps need to be attached in a palmar-radial to dorsal-ulnar direction.
- Elastic straps are good with swollen or painful joints.
- Elastic straps may be used to assist with directional pull or in dynamic assist splints.

Elastic strap assists this dynamic supination splint into the desired position

Correct strap placement

Elastic straps can be a legal issue as the soft elastic loosens the attachment of the splint to the arm/finger/limb, causing the patient to over tighten the straps.

Document your orthotic training. It is not a bad idea to have your orthotic training on a form and have your patient sign the form stating they understand the wear, care, and precautions of the orthotic.

- Be conscious of the pressure applied from the straps. You want an even distribution of pressure especially on bony areas.
- You may want to permanently attach one end of the strap to the splint material with rivets. Some splint materials allow for easy application of a permanent strap by heating the splint material and pressing the strapping into the thermoplastic.

Correct strap cutting into the forearm

EHT thanks all who have sent us great testimonials about our company. This keeps us improving and rooting for everyone. Here are a few of the kind words shared with us. Please send more!

- Just a quick “THANK YOU” for all that you two do for the field of hand therapy. I passed the CHT test on my first shot and I attribute a great deal of that to your “purple book”! I don’t know if the test was easier than I thought, or I was just so well prepared by your book and the question answer format. Keep up the great work...
- I just wanted to thank you for publishing the “purple book” as a study guide for the CHT exam. I just recently found out that I passed the exam (first try!!) and I don’t think I could have done it without your valuable resource. Keep up the good work!
- Just wanted to say thank you for the purple book and practice tests for the CHT exam. They were very helpful in helping me pass the test. I also want to thank you for your promptness with responding to my e-mails. I really appreciate it.

Correct strap placement
Not wanting to pass up this extraordinary opportunity, I phoned him back with the idea of bringing a PT with me, offering “two for the price of one.” The deal was sealed.

The following day, Leah Naseem and I arrived at 7 am at an abandoned women’s prison in East LA and were treated like queens. It wasn’t long before we met the producers and the director, Joel Schumacher (the Batman movies, Phantom of the Opera, The Client). Joel proceeded to explain two scenes to us in which Jim would be working with his doctor/therapist (it’s the movies: his doctor can be his therapist...), performing therapeutic activities in his recovery from a head injury. No hand injury???

“Did you bring some testing or training instruments that we can use as props for fine-motor dexterity?” asked Joel. I must have been as white as a ghost as I scrambled to recover tidbits of neuro information buried after 26 years in hand therapy. “Well, everything I’ve brought is...um...for a hand injury, but let me take a look.”

The medical props company came up with some brain-teaser puzzles, and I placed a few ADL items and a ball on the table for background. About an hour later (having had a chance to brain-storm with Leah and phone a colleague for advice), Jim arrived on set focused and ready to learn. We had decided that flexor spasticity would fit the director’s vision, combined with some mild difficulties in focusing his attention. We discussed,
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<th>JAS SPS Therapy</th>
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<td>Manually adjustable constant positioning provides stress relaxation loading</td>
<td>Constant tension system provides creep based loading</td>
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<td>Fulcrum positioned to prevent joint surface loading</td>
<td>Fulcrum positioned across joint, creates joint surface loading</td>
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<tr>
<td>1.5 hours daily treatment time</td>
<td>8-12 hours daily treatment time</td>
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<tr>
<td>7-10 weeks average total treatment time</td>
<td>12-26 weeks average total treatment time</td>
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<td>Devices work bi-directionally</td>
<td>Most models work in one direction only</td>
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<td>Custom fabricated devices</td>
<td>Off-the-shelf devices</td>
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demonstrated, and practiced with Jim Carey. He was a quick study as he attempted grasp/reach/release of the puzzle pieces with the flexor tonicity, and adeptly added pertinent affect.

Our main job as technical advisors was over, but we were asked by Jim’s assistant if we would remain on set for the remainder of the day “should Jim have any questions.”

We were fed scrumptious gourmet food, were provided with our own trailer to relax in, and thoroughly enjoyed the filming experience. Not to mention getting paid (heftily) for our 10 hours on set. It was fascinating to observe the strong hierarchy of power from the director down. For example, when gait training scenes were being shot without consulting us in advance, we advised the assistant director and sound technicians in our vicinity that “toe-ball-heel” was exactly backward. They shrugged their shoulders, suggesting that one doesn’t second-guess the director. Subsequent pleadings to various crew members were of no avail. So we shrugged too.

Jim and multiple crew members expressed their appreciation for our technical advice and seemed truly pleased with our services, though we felt considerably underutilized.

When this psychological thriller hits the movie theaters in 2007, consider the following: Was Jim a believable head-injured character? Did you notice the button hook on the table when he was nearly recovered, instead of during the early rehab phase? Was the “toe-ball-heel” fumble corrected in the editing room?

This unusual experience of consulting to the movie industry is yet another example of the diversity of the OT and PT professions. Always be on the lookout for unique practice opportunities!

Thank you Laurie. We enjoyed your journey to Hollywood and look forward to watching NUMBER 23 from a whole new perspective!

Wazzzzzz Up?

Have you ever considered going to Canada? Now is the time if you been thinking about it. They are having their second annual meeting (May 4th - 6th 2007) and will feature some great hand therapy content. Visit www.handtherapy.ca to learn more about this meeting.

Have you looked at our shoulderama package? If not now is the time as we have 5 free gifts left. If you order Shoulderama you will receive a Shoulder Pul-ez with door bracket and the comprehensive RangeMaster™ Exercise Guide as a gift compliments of therapeutic dimensions. www.theradim.com

Have you looked at this radial nerve splint designed by a fellow O.T? It is fantastic low profile splint. For more information see ad on page 18.

Do you want your Masters in OT? Built specifically for practicing occupational therapists, this e-Learning program gives you flexibility and access to the finest curriculum available. Visit www.otdegree.com/handtherapy

Don’t forget to go to Philly February 24 - 27, 2007. We are going to be teaching at this wonderful meeting and will have a booth. It is going to be a great meeting and would love to meet more of you soon! Check out http://www.handrehabfoundation.org/
1. What is the difference between Dupuytren’s disease (DD) and Dupuytren’s contracture (DC)?

2. What does NR stand for, when discussing Dupuytren’s contracture?

3. According to Susan’s Therapy Corner article, when is a splint indicated post DC surgery?

4. NR is a new procedure. TRUE or FALSE

5. Laurie Roundtree was an OT technical consultant for Jim Carey in what upcoming movie?

6. Dr. Barry usually prescribes a splint following the NR procedure. TRUE or FALSE

7. You should avoid applying forearm straps in an oblique direction. TRUE or FALSE

8. Elastic splint straps or any splinting accessories may have legal concerns. TRUE or FALSE

9. Following the NR procedure for DC, when is the “snap” typically experienced?

10. What is one complication often encountered following invasive surgical DC release that you usually do not experience with the NR procedure?

11. The NR procedure is usually performed in the physician’s office. TRUE or FALSE

Answers on page 23
as a result of excessive exercise. If this begins reduce the intensity of the exercise regime.

Week 2

Begin scar massage after sutures are removed. The scar is often very tender and thick and will benefit from early scar management including scar molds, silicone or ultrasound. Silicone gel sheeting or Otoform can also be used at night with the splint. The patient may also require a desensitization program. If several fingers and the web space are involved, a glove with gel lining may be the best scar compression option. At 2 weeks, the patient will likely begin to tolerate performing light functional activities and should be encouraged to use the hand as often as possible. Continue all therapy interventions from week one.

Week 3-4

Continue ROM and scar care. The patient can progress to light grip strengthening to include a general upper extremity strengthening program. If the patient had the open palm technique he/she will likely be several weeks behind those who have had the closed technique as it will take several weeks for the wounds to fully close. Strengthening and gripping will be delayed until closure. Strengthening program emphasizes functional activities and return to work.

Post-op Concerns

The biggest thing you need to watch for is a flare reaction as they can quickly lead down the path to RSD/CRPS. The onset can be insidious and it can be difficult to distinguish between normal post op swelling and pain. If you think the person is heading towards CRPS then you need to back down the aggressiveness of your therapeutic intervention. You also need to keep an eye on edema as unresolved edema can result in periarticular fibrosis and contractures. Key methods of edema control include: elevation, wrapping, use of gloves, massage, HVGS, MEM, and AROM.

Another area to keep an eye on is the wound. An open palm technique will require more management to ensure the hand does not get infected. If they are treated with a closed procedure you may have patients that have hematomas that need to be closely monitored. If a patient has a graft you will not be moving them quite as early and need to be careful not to disturb the healing bed.

Therapy After Needle Release (NR)

If you are fortunate to see a patient after he/she has a needle release you will find they are very often pleased with the treatment technique. Their post procedure program is as follows: Elevation of the hand for the first day. Instruction in finger extension exercises and stretching is provided. If there has been long standing contracture, generally of the ring and little fingers, then nightly extension splinting for three months is indicated. If the patient’s capsule is tight (usually the PIPJ) you can implement static progressive splinting or dynamic splinting.

Unlike open procedures where loss of flexion becomes a problem, this does not occur with the needle release (NR). Pre and post procedure flexion and hand strength are usually unchanged. NR appears to be a promising procedure and a good alternative to invasive surgical intervention. Time will tell.

Facts

- After surgical intervention, the overall result of a Dupuytren's release is realized after one year.
- MP contracture releases do much better than releases at the PIP.
- Loss of finger flexion is seen with all types of surgical intervention.
- Dupuytrens is a progressive disease and loss of some extension is inevitable.
- Overly aggressive rehabilitation can contribute to a poor outcome.

Continued on page 23
Test Your Knowledge Answers

1. DD is manifested by an initial & sometimes tender lump or nodule in the palm. Often, a coarsening of the skin and thickening of subcutaneous tissues, and palmar fascia follows. If the bands attach to the fingers and then contract, the shortening leads to a persistent flexion deformity of the fingers. The condition is then referred to as a Dupuytren’s contracture (DC).

2. Needle Release

3. Always for PIPJ contracture & if MD orders a splint post-op. MPJ splinting will vary.

4. False (new in US only)

5. Number 23

6. False

7. False (you want to apply in an oblique fashion)

8. True

9. Immediately (in Doc’s office)

10. Loss of finger flexion

11. True

Final Thoughts

Dupuytren’s disease is one of my favorites to treat. They are, very often, patients that like to kick up and have a good time in the clinic so I enjoy having them around. Overall they do very well and are happy they had surgery as they can do things they could not do before surgery. I would take 100 Dupuytren’s patients for every CRPS patient I see! FYI we have a 2.5 hr. Dupuytren’s Disease online course which goes into more detail about this disorder. For more information or to order our online movie course please visit: http://www.liveconferences.com/product.asp?cid=32

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<tr>
<th>Q: Can splinting stop or slow down the Dupuytrens process?</th>
<th>A: Splinting has not been shown to be effective in slowing or stopping the disease.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q: Can Needle Release be used for contractures that are solely manifested at the PIPJ?</td>
<td>A: Yes, needle release (NR) is effective for contractures which manifest solely in the PIPJ.</td>
</tr>
<tr>
<td>Q: If yes, how successful is this?</td>
<td>A: Not as effective as the results from MPJ.</td>
</tr>
<tr>
<td>Q: How can I get my Dr. to do this NR procedure? It sounds great.</td>
<td>A: Have your physician contact a NR or NA practitioner. A list of those trained can be found at: <a href="http://assoc.wanadoo.fr.badois-dupuytren/htm">http://assoc.wanadoo.fr.badois-dupuytren/htm</a></td>
</tr>
<tr>
<td>Q: Is NR covered by insurance?</td>
<td>A: Yes, it is listed under palmar fasciotomy.</td>
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<tr>
<td>Q: Have you had any cases re-occur after NR? If yes, how quickly did that occur?</td>
<td>A: I have not seen any. The rate is 30-50% after 5 years. A repeat NR is not problematic, unlike open surgery.</td>
</tr>
<tr>
<td>Q: Does the patient obtain maximum gains after NR procedure immediately or does it take time to see the full benefits?</td>
<td>A: Normally the maximum gain is immediate. I have had one patient that experienced a &quot;snap&quot; about two weeks following the procedure and she felt her palm opened further. The bands are penetrated and weakened during the NR. An incomplete release was probably converted to a complete release with the snap.</td>
</tr>
<tr>
<td>Q: Typically after NR do you require the patient go to therapy?</td>
<td>A: I recommend therapy if there has been a severe, prolonged contracture, particularly of the ring and little fingers. The therapy is for night splinting and instruction in extensor strengthening and stretching.</td>
</tr>
<tr>
<td>Q: If the patients go to therapy after NR what procedures you want the therapist to perform?</td>
<td>A: As stated above</td>
</tr>
<tr>
<td>Q: Do you splint the patient after NR if only the MP is released?</td>
<td>A: Normally, no</td>
</tr>
<tr>
<td>Q: Do you ever opt for surgical intervention now that you have this new skill in your bag of tricks?</td>
<td>A: If surgical intervention is necessary, I refer to a hand surgeon. My practice is limited to the needle release.</td>
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Thank you Dr. Barry!

Susan and Nancy
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Did you hear that SLOUCHING can be good for you? If you did, be wary.

According to the ERGONOMICS Society (www.ergonomics.org.uk & www.ergonomics.org) slouching is not recommended.

I have been reading reports recently that advocate slouching while at a computer. In fact, some journalists are stating that slouching is the safest way to sit. I say to anyone reading these reports that you must approach with caution. You must analyze the report. The “slouching” research was compiled by a Scottish hospital saying that sitting at a 135 degree angle between the trunk and thighs is better for you than sitting bolt upright. However, no account was taken of the impact of this posture on the neck.

The head must be supported during sitting. In fact, unless the neck is adequately supported when sitting, the individual will move their head so that it is upright, effectively bending the neck by 45 degrees. This will put significant strain on the muscles and joints in the neck. Also, unless individuals have unnaturally long arms, most people are unable to reach the keyboard when reclined by 45 degrees.

It has long been recognized that increasing the angle between the trunk and thighs is beneficial for the spinal posture and strain in the back. However, it is better to achieve this by supporting the back in a relatively upright posture and adjusting the chair so that the hips are higher than the knees. Some seat bases tilt to allow this.

Remember, that any one position/posture maintained for long periods is not good for anyone. I have always promoted the 20/20/20 rule. Every 20 minutes, look 20 feet away and stretch for 20 seconds.

Ergonomists have been advocating postures that will minimize potential hazards, primarily static work and force. According to OSHA and many ergonomists each person has to take responsibility of their posture. We need to follow some simple ergonomic posture principles as outlined below:

• All work activities should permit the worker to adopt several different, but equally healthy and safe postures.
• Where muscular force has to be exerted it should be done by the largest appropriate muscle groups available.

What I have found to be problematic is that most people don’t change easily. In fact, many people don’t even realize they have poor sitting, standing, or lying posture. I have always said, posture is by far the cheapest area to correct but, by far, the most difficult to correct. One reason is because it is difficult to monitor yourself. There are numerous computer programs, gadgets, and training seminars to remind us to self correct our posture. Sometimes these programs can help, but the recipient to the training must be willing. Another reason posture, or I like to say, behavior is so difficult to correct is because the person must believe they are hurting themselves and that they have control to fix, at least some, of the problem. Unfortunately, when I recommend self correction I usually get the response “I have been doing it this way for ever... and I have been fine...not until recently have I had the problems”. Well, this thought process can and is self destructive. So we as ergonomists and therapists must address posture and behavior as well as the tangible equipment hazards.
The Kinesio Taping® Association is proud to present a structuring of a new database and teaching system here in the US and its territories. The Kinesio Taping Association has created a new teaching protocol that will allow us to properly channel our efforts towards the proper standardized teachings needed to better train Kinesio Taping practitioners not only on a national basis, but also an international basis.

As we move into the future it is of the up most importance that we stay on the cutting edge of patient care. Through this new structure, KTA will be able to better equip Practitioners with the tools of success and health. It is for you that we present the New Way of Taping that gives real value to your investment and the investment of your patients.

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