



LYMPHATOUGH[®]

Feel the Performance[®]

CASE REPORTS

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ANKLE SPRAIN

PATIENT: 50-year-old client who enjoys jogging and motorcycle sports. He suddenly got a trauma in his left ankle by stepping into a hole in a parking spot. He sprained his ankle. He did not have any ice to allow cold therapy but instead, he applied compression with a scarf. Immediately after the injury, he felt pain and soreness in his foot. After one resting day and some pain killers, he was able to load his foot again with minimal pain or adverse effect to his walking. However, on the following week, there was residual swelling and soreness in the ankle when loading the lower extremity. The client went for a walk and noticed that the range of motion was reduced in the ankle and swelling caused pain.



Ankle before the treatment.



Ankle after the treatment.

METHODS: Approximately two weeks after injury, ankle was treated with LymphaTouch. Treatment was conducted with treatment cup sizes 60 and 80 mm. The treatment was started by activating supraclavicular fossas with 80 mmHg, 2 s pulsation, then proceed to upper back. Activating the backline treating directly over the spine with 80 mmHg, 2 s pulsation. Treatment of backline using fascia technique directly over the spinal area by pulling and twisting with 120 mmHg, 2 s pulsation. Then applying sliding technique to the spinal area in S-shape with 120 mmHg, with constant suction mode. Activating lymph nodes of the inguinal region with 80 mmHg, 2 s pulsation and treating distally towards the medial side of the knee and further towards the ankle. The ankle and swelling area were treated with 180-250 mmHg. Additionally, by adding vibration with 80 Hz, 180 mmHg, work-rest ratio 80%. Treatment proceeded by treating to proximal direction with 80 mmHg, 2 s pulsation. Treatment finished at the supraclavicular fossa. After LymphaTouch treatment, kinesiology tape was applied with lymph technique.

RESULTS: Swelling reduced immediately after the treatment, some aching sensation remained in the ankle for the following day. Next morning after the treatment, there was still some pain, but the patient could walk normally again.

PATIENT'S COMMENTS ABOUT THE LYMPHATOUCH TREATMENT

"I was confident enough to run again one month after ankle sprain and my ankle is recovering day by day. I recommend LymphaTouch treatment to all who have swelling in the ankle. An incredible treatment in just 45 minutes."

BROKEN KNEE

PATIENT: Patient is a 53-year-old woman, with a fractured patella and the knee was operated due to the fracture. Since the trauma and still, four weeks after the surgery, she has edema covering a large area around the knee: circumference in the swollen right knee is 36 cm, vs. left knee 32 cm. There are color changes in the skin on both sides of the scar, and the tissue is tight. Patient wears braces, with immobilization removed a week earlier. Pain is on level four on the VAS scale from one to ten, and range of motion is clearly reduced. Active flexion is 20 degrees, passive 30 degrees.

METHODS: Patient was treated twice using the LymphaTouch device. The inguinal lymph nodes were first activated manually. LymphaTouch was then applied in a pulsating mode with 50-90 mmHg of negative pressure setting to transport the lymph away from the knee area towards the inguinal lymph nodes. Scar area was finally treated using continuous 90 mmHg suction, both by keeping the treatment head in place and by sliding it on the skin. The treatment sessions were 25 minutes.

RESULTS: Swelling in the knee was clearly reduced already during the first treatment session – the circumference of the knee decreased by 1 cm. During the second treatment a week later, the circumference reduced by a further 0,5 cm. Range of motion improved by ten degrees, the color in the skin improved and the scar became lighter. The patient considered the treatment pleasant.

KLINIKKA 22, HELSINKI, FINLAND

MIKKO VIRTALA, PHYSIOTHERAPIST / LYMPHEDEMA SPECIALIST



PERONEUS LONGUS OPERATION

PATIENT: Active lady, 68 years of age. Peroneus longus operation on her right ankle.

PROTOCOL: LymphaTouch treatment was started preoperatively one day before the operation to activate the lymphatic system to work in an optimal way. The treatment was done by the general rule proximal-distal-proximal treatment direction. Negative pressure pulsed 2 sec/50% was used whole time. Treatment cups 60 mm and 80 mm. The treatment was initiated posteriorly on trapezius activating lymph nodes in the supraclavicular fossa, terminus area. Negative pressure 80 mmHg, stationary technique, altogether about 10 pulsations on three different spots so that the treatment cup covers about 1/3 of the previously treated area.

The treatment proceeds on the spine from C7 to the sacrum. Treatment cup 80 mm. Negative pressure at the first run down was 80 mmHg, later 100-110 mmHg, stationary technique. The spine area is activated twice up and down so that the treatment cup covers about 1/3 of the previously treated area.

Activating the inguinal nodes with technique described in stage 2.

The treatment proceeds distally to the lower limb using the same technique as described earlier.

Treatment cup 80 mm on the thigh, 60 mm on the leg and foot. Activating the lymph nodes on the posterior and medial knee area with stationary technique and about ten pulsations altogether.

Negative pressure 80-100 mmHg except the sole of the foot where 250 mmHg is used. Treatment returns via the calf and posterior thigh proximally.

METHODS: Physiotherapy started late after the operation because the wound got infected. First physiotherapy session was six weeks after the surgery. Patient also got a nerve compression problem because the plaster cast caused too much compression on the foot. The dorsal side of the foot was first numb, later hypersensitive and suffered from allodynia. During the first session activating the whole lymphatic system in the same way as preoperatively. Edema on the foot and behind the lateral malleolus. Because of the hypersensitivity the dorsal side of the foot was activated with treatment cups 50 mm and 60 mm, negative pressure 20-40 mmHg. In this stage treatment behind the lateral malleolus was done around the scar, treatment cups 35 mm and 50 mm, negative pressure 50-70 mmHg evaluating the scar tissue.

There was a small amount of edema on the foot for a long time. The biggest problem still was the hypersensitivity on the foot, why very little negative pressure was used. During the next weeks, the biggest help with LymphaTouch was treating the scar tissue. The treatment was done once a week because the patient lived more than 100 km away. She got home treatment advice which are described later. The mid part of the scar was sensitive, painful, and moved badly. The treatment was initiated every time activating the terminus area on the supraclavicular fossa anteriorly with 50 mmHg or posteriorly with 80 mmHg. On the first sessions the scar was treated around the scar. Treatment cups 35 mm and 50 mm, negative pressure 40-70 mmHg, stationary technique.

On the later sessions the treatment proceeded around the scar with negative pressure 50-100 mmHg. Different techniques were used: stationary, lift and twist, knitting. The scar was treated also on it.

Nine physiotherapy sessions after the operation. LymphaTouch treatment was combined with manual fascia techniques and manual therapy mobilizing the scar. Also, ankle mobilization, mobility and balance training and therapeutic training were used targeting to better walking and all every day functional tasks.

The patient got advice to home treatment modalities as cupping with manual glass cup, silicone tape and 6D tape mobilizing the scar tissue.

RESULTS: LymphaTouch had the biggest benefit in this case preoperatively and treating the edema and scar tissue. Following the tendon operation, the treatment result with LymphaTouch in swelling and scar tissue mobility was amazing.

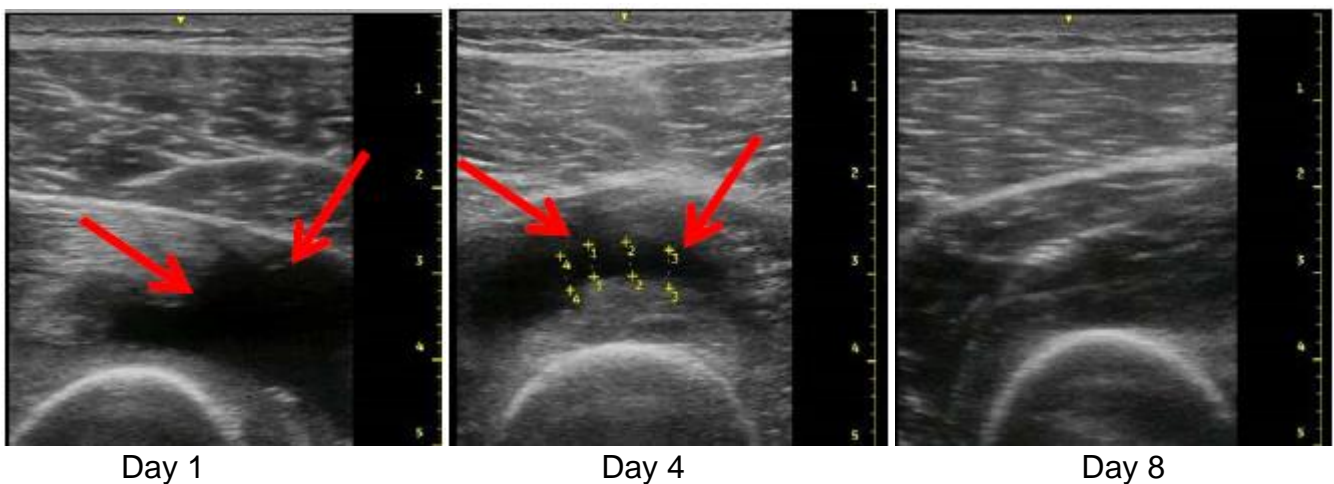
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CONTUSION INJURY

PATIENT: A professional ice hockey player injured his vastus intermedius muscle during competition and needed to jump off the ice due to the contusion injury.

METHODS: He received PhysioTouch-device treatment followed by Cryonic ultracold to relieve swelling and pain for four days. In ultrasound (US) photos, the prominent contusion injury is marked with red arrows (days 1 and 4).



PhysioTouch and Cryonic ultracold treatments were started on the first day of injury approximately six hours after first aid (RICE, US photo at day 1). The athlete used crutches due to pain for two days.

According to the patient's sensations, pain reduced after the first treatment (VAS 8 à 5,5). The contusion injury of vastus intermedius muscle recovered on the tissue level in eight days with no obvious scar tissue formation at the injury site. The injured muscle tolerated light stretching on post-injury day four. The athlete returned to sports on post-injury day nine.

RESULTS: According to my clinical evaluation, the combined PhysioTouch- and Cryonic ultracold treatments speeded up the recovery of contusion trauma significantly from the typical three-week recovery time. The athlete could continue light exercise already on post-injury day five and returned to sports on post-injury day nine.

UNIVERSITY OF TURKU

LAITALA TIINA, DOCENT, ATC

H&N LYMPHEDEMA

PATIENT: Patient is female diagnosed with anaplastic thyroid cancer/ metastatic differentiated carcinoma and in the past, hx lymphoma. Patient was very proactive in sourcing treatment and had just retired from work prior to her diagnosis and was enjoying retirement hobbies such as travel, gardening, and home maintenance projects. In the beginning of the therapy, she was diagnosed with stage 1a LE – MDACC rating scale (soft visible oedema, no pitting, and reversible)

METHODS: Aim of the therapy was to reduce post-operative symptoms of swelling and post chemo/radiation effects of stiffness and fibrosis. Therapy was started 7 weeks post radiation treatments. LymphaTouch treatment was conducted once per week in conjunction with regular lymphoedema therapy of MLD, kinesio taping, compression therapy with foam inserts, SLD (self-lymphatic drainage). Patient reported good compliance with compression therapy but poor compliance with SLD. She was very compliant with attending clinic therapy sessions.

LymphaTouch settings and techniques:

Pulse mode, default mode pulsation interval, 80 mmHg – 120 mmHg pressure range, 80 mm, 50 mm, 35 mm cups. Techniques included stationary and sliding with 80-60 mm cups for swelling, then 50 mm cup for lift and twist technique on fibrotic tissue.

RESULTS: At commencement of therapy, we measured swelling with ALOHA circumference measures (Assessment of Lymphoedema of Head and Neck)

	Circumference (cm) Before Intervention June 12 th 2020	Circumference (cm) After intervention July 23 rd 2020	Circumference (cm) Follow up visit August 19 th
Lower neck	41.5	36.7	37.6
Upper neck	44.4	40.8	39.0
Ear to ear	25.4	24.0	24.0

Swelling was also rated as MDACC rating scale for lymphoedema (MD Anderson Cancer Centre). Patient rating remained at the same level as in the beginning, 1a - soft visible oedema, no pitting, reversible.

CASE REPORTS

Before the intervention



After the intervention



Range of motion of the neck was evaluated visually. Rotation improved by estimated 50 % compared to initial measure. Lateral flexion improved by estimated 20% compared to initial measure. In both directions, there was reduced movement towards left when compared to right side before the intervention.

Skin: Radiation induced telangiectasia was evident at supraclavicular and medial chest wall over sub pectoral nodal area (see photos). Color and swelling appeared to have reduced over this area and contracted over the six-week period.

PATIENT COMMENT: Patient commented that the therapeutic feel of the device was pleasant and acceptable. It afforded her improved range of motion after each session. She did comment that she particularly liked the LymphaTouch therapy in *conjunction* with the other usual modalities of lymphedema therapy.

CHRIS O'BRIEN LIFEHOUSE, AUSTRALIA

**SANDRA TEMPLETON, OCCUPATIONAL/LYMPHOEDEMA THERAPIST,
ONCOLOGY MASSAGE THERAPIST**

H&N LYMPHEDEMA

CHRIS O'BRIEN LIFEHOUSE, AUSTRALIA

SANDRA TEMPLETON, OCCUPATIONAL/LYMPHOEDEMA THERAPIST, ONCOLOGY MASSAGE THERAPIST

PATIENT:

Patient is 54-year-old male diagnosed with left lateral tongue squamous cell carcinoma in September 2019 and left SCC metastatic SCC 1/36 extra nodal spread in May 2020. Nodal involvement at Level III lymph node. Patient has undergone the following operations and cancer treatments:

September 29th, 2019 – left partial glossectomy

May 28th, 2020 – left neck dissection

June 2020 – postoperative chemo/radiation therapy 6 weeks/30#s 60gry

Patient was very proactive in sourcing treatment as he had experienced post-surgical swelling in the past. He contacted me after discharge to ask what could be done after his surgery (2020 Neck Dissection) to reduce swelling and to reduce symptoms prior to chemo/radiation therapy. Patient was highly motivated to remain as functional as possible due to the demands of his job and co-parenting his young daughter.

METHODS:

Lymphoedema Therapy commenced 4 weeks post-surgery on June 29th, 2020. Aim of the therapy was to reduce post-operative symptoms of swelling and post chemo/radiation effects of swelling and fibrosis.

Between June 29th and October 19th, 7 LymphaTouch sessions occurred. Treatments were conducted once per week with 1-2-week intervals and pre therapy measures were taken. On October 26th, another session occurred where pre and post measures were done in one session.

Ideally treatment would be 1x week or more but demands on our clinic precluded this intensity of therapy. Patient also had 5 week gap in therapy partially due to re-admission to hospital with febrile neutropenia, severe dysphagia and poor oral intake.

1st session included LymphaTouch protocol and SLD (self-lymphatic drainage) only. 2nd-7th sessions were 20-min LymphaTouch with H&N protocol followed in addition to 20 min extra treatment to include SLD coaching, MLD (manual lymphatic drainage) kinesio tape and compression therapy

LymphaTouch® settings and techniques:

Pulse mode, default mode pulsation interval, 50mmHg – 150mmHg pressure range, 80mm, 50, 35mm Cups (scar therapy)

Techniques included stationary and sliding with 80-60 mm cups for swelling, then lift and twist with 35mm cup on tight scars

CASE REPORTS

RESULTS:

At commencement of therapy we measured swelling with ALOHA circumference measures (Assessment of Lymphoedema of Head and Neck)

	Circumference (cm) Before Intervention June 29 th 2020	Circumference (cm), End of 6 LT sessions, measures before the treatment, October 19 th 2020
Lower neck	46.2	42.7
Upper neck	49.9	48.6
Ear to ear	28.2	27.7

One further session with pre and post-test (40-min session with LymphaTouch only, pulse mode 80 mmCup 150mmHg, continuous mode 50mm cup over scar and radiation affected tissue/non fibrotic)

	Circumference (cm) Before treatment October 26 th 2020	Circumference (cm) After one treatment October 26 th 2020
Lower neck	45.0	44.4
Upper neck	50.5	49
Ear to ear	28	28

MDACC rating

1a when therapy commenced in June (soft visible oedema, no pitting, reversible).
Currently, 1b (soft pitting oedema, reversible).



HALLUX VALGUS SURGERY

PATIENT: 57-year-old female doctor who underwent a hallux valgus operation on 8.12.2014. She had hallux valgus surgery on both sides and decided to have the left side to be operated first, with surgery being planned for the right foot later. MTP-joint I TMT and demonstrated arthrosis. TMT I was fixated with arthrodesis to the distal proximal direction with a 4 mm screw and medially set a five holed lock plate with four lock screws. The alignment of the big toe was fixed with an akin osteotomy, 3 mm screw. Patient was discharged from hospital on next day after the operation with a resection boot and crutches. Bandaging and stiches were part of the clinical protocol for the initial two weeks. On review, the patient was prescribed bandaging of the foot for six weeks with gradual transition to a normal shoe and full weight bearing. Patient was prescribed pain medication (Burana and Panacod) and sick leave for six weeks. Patient went back to work on 26.1.2015.



METHODS: LymphaTouch treatment was made a total of six times during five weeks' time. Duration of one treatment session was 45-60 minutes.

Treatment was performed by activating the lymph nodes of supraclavicular fossa, treating the backline and spinal area. Treatment proceeded treating downwards and towards the operated area passing the knee hollow and ankle. The abdominal area was then treated. Treatment concluded at the supraclavicular fossa. At the two last treatment sessions, the scar tissue at the operation site was treated locally directly over the scar tissue.

RESULTS: Swelling reduced, hematoma faded, patient experienced lower limb lighter after the treatment. Patient felt thirstier than normally after a few treatments.

PICTURE SERIES



Before treatment

After treatment

LymphaTouch treatment #1 Dec 11th, 2014
NOTE! The lateral malleolus area which was swollen and sensitive for touch.

The treatment reduced swelling.



Situation on Dec 13th, 2014

Patient's comment:

"The sensation of pressure is clearly reduced during movement. I have sensation of pain in the ankle at night but no pain of the operation site or surgery scar."



Situation on Dec 14th, 2014

Patient's comment:

"The swelling of the ankle is gone and the mobility increases. Pain in the foot is gone until the evening."

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LymphaTouch treatment #3 Dec 18th, 2014

Patients's comment:

"This was the first night without painkillers. The ankle feels even more flexible. The flexibility seems to increase."



LymphaTouch treatment #4

Dec 22nd, 2014

Stiches were removed the same morning.

This picture was taken immediately after the stiches were removed.

The surgeon had commented that the patient must have been keeping her foot well elevated due to small amount of swelling.

LymphaTouch
treatment #5

Jan 8th, 2015



LymphaTouch
treatment #6

Jan 12th, 2015



Note! Neat scar.

PATIENT'S COMMENTS ABOUT THE LYMPHATOUCH®-TREATMENT



CASE REPORTS

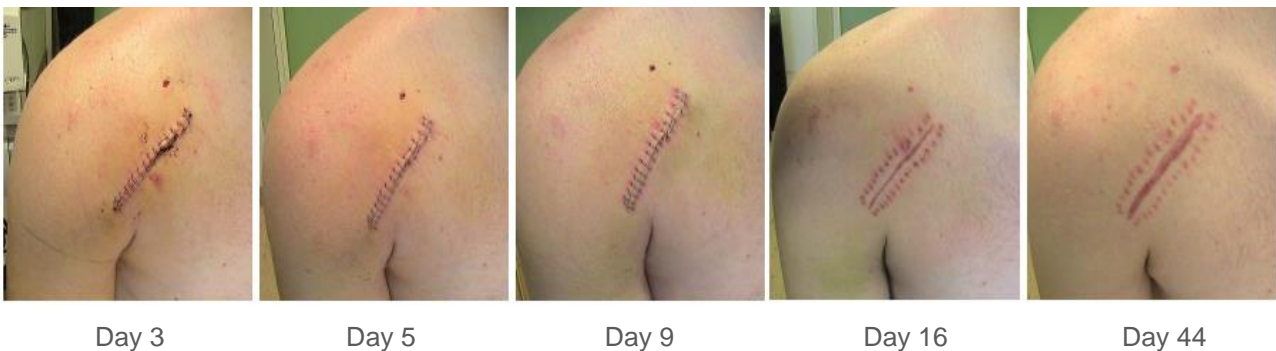
“I recommend the LymphaTouch treatment since from my experience, the activation of the lymphatic system results in overall well-being. The treatment speeded up the local healing process of the swollen area and the entire foot. In addition, one of my old scars faded, thinned, and loosened up from its adhesions. I could also imagine receiving this treatment every now and then if I feel swollen.”

LABRUM SURGERY

PATIENT: A professional ice hockey player injured his right shoulder labrum in a contact situation, and it was repaired in open surgery. Cryonic ultracold was combined with PhysioTouch treatment to decrease swelling and pain in the operated shoulder for ten days. The patient required strong pain medication only two days postoperatively and stopped using NSAIDs already on the seventh postoperative day.

METHODS: Cryonic ultracold and PhysioTouch treatments were started on the third postoperative day (photo). Immediately after removing the wound tape, the operation site was swollen, and the patient felt pain (VAS 7,5). Mobilization of the shoulder was prohibited because of the surgery. The athlete experienced his right wrist and fingers swollen and numb. The wound and operation site all the way to the upper part of scapula was treated with ultracold on 3rd-16th postoperative days. Additionally, the operation site (excluding the wound with a +/- 5 cm safe margin), armpit and entire upper limb all the way to the palm was treated with PhysioTouch on the third to eighth postoperative days.

According to the patient's sensations, the first treatment on postoperative day three reduced pain (VAS 7,5 → 4,0) and the numb feeling in the shoulder area. The circumference of the right wrist reduced 0,3 cm after the treatment. Additionally, swelling in fingers and redness at the operation site reduced. Swelling of the surgical wound reduced 24 hours after the first treatment. Patient also experienced less pain (VAS 6,0 on fourth postoperative day). After the second treatment, the treatment site and shoulder were almost painless (VAS 6,0 → 2,5). According to the patient, the operated shoulder was completely painless on seventh postoperative day. Staples were removed on the 16th postoperative day (photo after the removal of staples and the treatment).



Thanks to reduced pain and swelling, shoulder flexion and external rotation improved exceptionally fast. Normal range of motion was reached 4 weeks after surgery. Light therapeutic exercises against gravity were started six weeks postoperatively (day 44). Actual strength training was started 2,5 months after surgery when tensile strength recovered to the required level.

CASE REPORTS

CONCLUSION: According to my clinical evaluation, Cryonic ultracold and PhysioTouch treatment reduced experienced pain significantly and ROM of the operated shoulder recovered exceptionally fast. The challenge was to get the patient to remember that although the shoulder was painless, the operated structures cannot tolerate therapeutic exercises at too early stage. With an active progressive approach, the athlete could return to aerobic and anaerobic training and other supporting exercising quickly (two weeks after surgery). This supported his return to competitive sports.

UNIVERSITY OF TURKU

LAITALA TIINA, DOCENT, ATC

LYMPHATOUGH IN WEIGHTLIFTING

Finnish National Weightlifting Team used LymphaTouch in 2-day training camp for approximately ten athletes.



Feedback was positive and the athletes felt that treatments were efficient.

” The treatment of my injured foot was pleasant, healing and enhanced recovery” - Iiro Kallioinen, Finnish National Team Weightlifter



Foot before the treatment.



Foot after the treatment.

JIMMY TAIVALOJA, PROFESSIONAL MANUAL THERAPIST / STRENGTH AND CONDITIONING SPECIALIST / MEDICAL TRAINER

PATIENT TESTIMONIALS

A LITTLE MACHINE THAT DOES WONDERS

“To whom it may concern,

I have been going to Louisa (occupational therapist) for almost a year now. She has helped me tremendously on my lymphedema by working on my legs.

My legs are half the size of what they were when we began this project. A little machine that she is using right now had it done wonders and has found pockets in my entire body that needed to be unclogged and released. I feel so much better after the treatments and I can breathe better and not wheeze.

I look forward to seeing her on Tuesdays and Thursdays for my treatment.

Sincerely yours,
B.R.”

HOW HAS THE NEGATIVE PRESSURE AND VIBRATION HELPED?

FEET – I am a very brittle diabetic and suffer from sever neuropathy in my feet. With treatment of negative pressure, I started having more feeling in my toes and feet.

LYMPHEDEMA – I started having problems in January 2020 with cellulitis in my lower legs. Medication did not help. I was referred to physical therapy which used negative pressure and vibration with compression hose. After three weeks, the cellulitis is gone, and I can now walk $\frac{3}{4}$ mile each day.

CHEST – I am a Vietnam veteran with diabetes, COPD, sleep apnea and asthma. I always have sinus drainage and chest congestion. While in physiotherapy I had muscle cramp under my rib cage. The therapist used negative pressure with vibration on my back which eased the muscle cramp. 2-3 hours later, I coughed up a good amount of mucus which improved my breathing. I recommend negative pressure and vibration treatment to anyone with breathing and mobility problems.

T. B.

GREAT IMPROVEMENT IN RECOVERY

“Before my therapy, I was unable to do arm stretches. My therapist started me on the LymphaTouch allowing my muscles to expand more with no pain. Much improvement I notice toward recovery of my movement.

Thank you for great invention.”

Ms. D.



LYMPHATOUCH[®]
CASE REPORTS

LymphaTouch[®] units are CE certified, and FDA Class 1 Exempt devices. RX Only. LymphaTouch Inc. is ISO 13485:2016 certified. Always read the contraindications and user manual before using the device. If you are uncertain of the suitability of the device for the treatment, always seek advice from healthcare professional prior to starting the treatment.
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