



The CURE method in the rehabilitation of low back and knee injuries of the Strongman

Case 1



Mr. Chris B, 37 y.o

Founder of Strongman, Tasmania

Complains:

- Low back pain for 8 weeks, with radiation to the Lt hip and leg.
- At rest – constant 2-3/10
- Aggravation up to 10/10 with physical activity, spastic in nature and taking a long time (hours or days) to recover
- Severely affecting his training process and putting at risk his ability to participate in future competitions

Examination:

Comfortable at present,

ROM in Lumbar spine, both hip and knee joint with no restrictions

SLE on both sides – no restrictions

Noticed slight reduction of power of the Lt hip flexion

Tenderness over Lt ILL, L3 interspinous ligament and the middle part of the Ilio-tibial band

Management Plan - CURE (Complex Unified Rehabilitation and Exercises) method

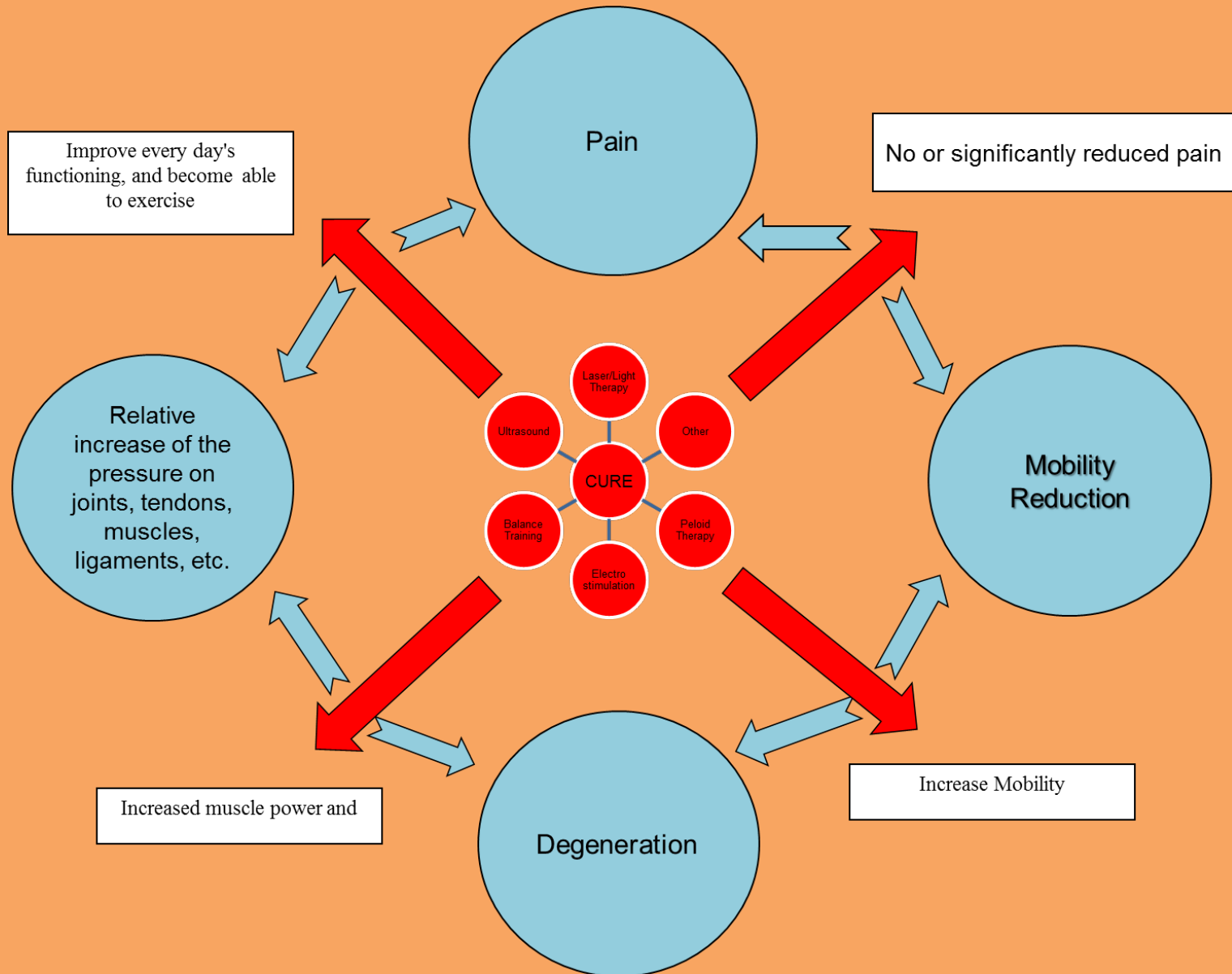
Complex therapy, included :

1. **Prolotherapy** - weekly
2. From second week a **combination of Low Level Laser Therapy** and **Electrostimulation (Russian Current)** of the anterior abdominal wall muscles and quadriceps muscles with aim to improve core stability and equalise both leg's muscle power– every second day

Russian Current is also called as Tone Burst current. It was first investigated by Russian Dr. Y M Kots. It provoked much interest because the successful Olympic team was using it in addition to their usual training program. It was suggested that its use lead to significant gain in muscle strength (about 30 – 40 %)

3. Gradual increase of work load during his training sessions

CURE method approach to the management of Acute and Chronic diseases including Musculoskeletal problem at the Sheffield Medical Centre



1. Electrostimulation:

- “Russian current” – Effectively increases muscle power in a short time
- IFC - Increases microcirculation, reduces pain, reduces muscle spasms
- Galvanic/electrophoresis – Improves microcirculation, needle free local medication delivery (steroids, anaesthetics, etc.)
- TENS – pain reduction
- Microcurrent – increases microcirculation, increases speed of the tissue’s regenerative process, reduces pain



A healthcare professional, wearing a red patterned shirt and glasses, is using a medical device on a patient's arm. The device is a white, cylindrical unit with a control panel on top and several colored cables (blue, orange, red) connected to it. The professional is holding a small, handheld device with a blue and white handle, which is being applied to the patient's arm. The patient's arm is resting on a table. The background is a light-colored wall.

2. Ultrasound

Improves microcirculation, needle free delivery of medication (steroids, anaesthetics, etc.) to the local tissues

Indications

- Joint problems, especially small joint OA
- Other musculo-skeletal problems, e.g. Tennis elbow, carpal tunnel syndrome, plantar fasciitis
- Chronic non healing ulcers

3. Low Level Laser Therapy (LLLT)

Increases microcirculation, activates the regenerative properties of tissues, relieves muscle spasms and reduces pain

Indications

Musculo-skeletal problems: Acute injuries, OA, Back problems, Fibromyalgia etc.

Asthma, COAD

Gastroparhesis

Urinary Incontinence

Maintain immune status during chemo and radiation therapy

Migraines

Non healing skin ulcers, abscesses and other skin conditions

Burns

ENT problems

Lymphoedema

4. Prolotherapy (Regenerating Injection Therapy)

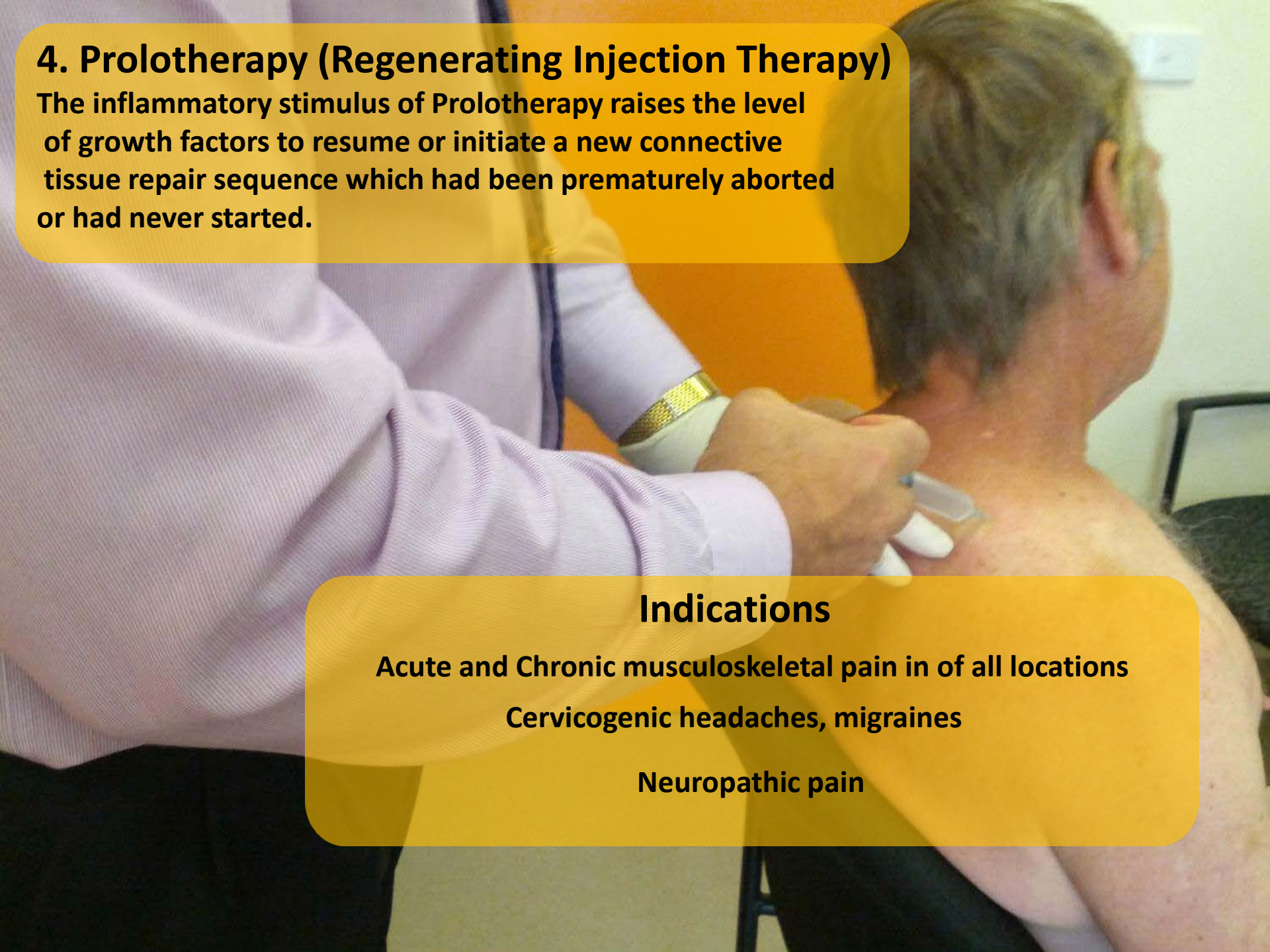
The inflammatory stimulus of Prolotherapy raises the level of growth factors to resume or initiate a new connective tissue repair sequence which had been prematurely aborted or had never started.

Indications

Acute and Chronic musculoskeletal pain in of all locations

Cervicogenic headaches, migraines

Neuropathic pain



Combined application of Electrostimulation and Low Level Laser Therapy





Rehabilitation exercise room

One week after:

Low back pain - Nil at rest and at present

With physical activity – light training, the pain is noticeably less intense, not as spastic and recovery time has reduced

Another complain:

Rt knee pain, restricting his training and competitive abilities:

Chronic, since 2009

Past treatment: Meniscectomy- 2009, Physiotherapy, NSAIDS prn

Obj: ROM – no restrictions, no swelling, no deformities

Tenderness over distal part of the Ilio-tibial band and along Saphenous nerve

Two weeks after

Low back - feels good, no pain at the time of the consultation.
Started to increase gradually the intensity of his training with
no increase of the pain intensity
Rt knee - No pain.

Four weeks after

Feels good
No pain in both areas
Functionally – no restrictions

1st - Tasmania Strongman with the new state record - May 2017



**2nd - National Strongman (Competition ran by the Australian Strongman Alliance) -
July 2017**



Case 2



Roman K. 37 y.o **Olympic weight lifter**

Training twice per day, six days per week (when leading up to a competition) - a lot of loads.

Complains: Constant pain 2-3/10 of both anterior knees, aggravating after training up to 9/10.

Past History: Two years ago he was diagnosed with both patellas tendinopathy.

Past management – numerous physiotherapy, massages.

For two years he was not able to compete.

Objectives: Both knees – no deformities, no swelling. ROM – no restrictions, no muscle weakness

Tenderness over both side inferior pole of the patella, aggravating with contracting quadriceps

Management Plan - CURE (Complex Unified Rehabilitation and Exercises) method

Complex therapy, included:

1. Started with prolotherapy, weekly - instant pain relief in the knee.
2. From the first week added electro stimulation - Russian current mode (quads and abdominals) – daily or second daily, before training. Made a huge difference in lifting, plus a lot less pain in the knee when lifting.
3. Added LLLT (904 matrix head with magnet) - 5 minutes, 80 hertz (inferior pole patella's region)- daily or second daily after training. Pain relief and feel a lot more mobile the next day.



Result

- No pain at rest
- Pain has reduced from 8-9/10 to 2-3/10 the day following the training.
- Feels a lot more confident lifting heavier weights and moving a lot more freely.
- Won an Olympic weightlifting competition in Launceston
- Qualified for a competition in Gold Coast on the 30th October - an event for World Master Championships, Oceanis championships, Pacific Rim Championship.

CONCLUSION

Use of the CURE method in a rural GP clinic:

- Successful use for acute and chronic sport and non-sport related injuries but limited due to population structure – predominantly aged people and lack of sporting activities
- 1231 people have used the CURE method in five years
- 602 people have used the rehabilitation facility in 5 years. with the most common age group being:
 - 61-70 years old: 171 people
 - 71- 80 years old: 143 people
 - (Remaining people from various other age groups)