

SELF MANAGEMENT EMERGENCY KIT



PAIN MANAGEMENT

PAIN MAY BE CAUSED BY A WIDE VARIETY OF FACTORS INCLUDING DAMAGE OR IRRITATION OF MUSCLES, TENDONS, LIGAMENTS, DISCS OR THE BONES AND JOINTS IN THE REGION.

However, pain can also be referred from internal organs, areas far away from where you are actually feeling the pain, or you can even get pain in times of great stress.

Pain may be in a specific and localised region, diffuse and covering a large region of the body, or refer into other regions like the buttocks, limbs, or the abdomen.

What are some factors that can affect pain?

Biomechanical factors

- Sustained or repetitive postures & activities
- Unaccustomed activities
- Increase in load

Internal factors

- Infection
- Inflammatory conditions
- Abdominal complaints
- Internal organ injuries or dysfunctions

Psychosocial factors

- Fatigue
- Stress
- Job satisfaction
- Relationship problems
- Social interaction



“Pain: an unpleasant sensory and emotional experience with actual or potential tissue damage, or described in terms of such damage”

– International Association for the Study of Pain

How long will your pain take to resolve?

Prognosis of painful conditions is individual and depends on all the prementioned factors.

Most episodes of pain will resolve on their own within 2-3 weeks (depending on the cause and severity, however many factors can contribute to pain being prolonged.

Following advice and exercise programming from your osteopath can improve healing times and return to full function.

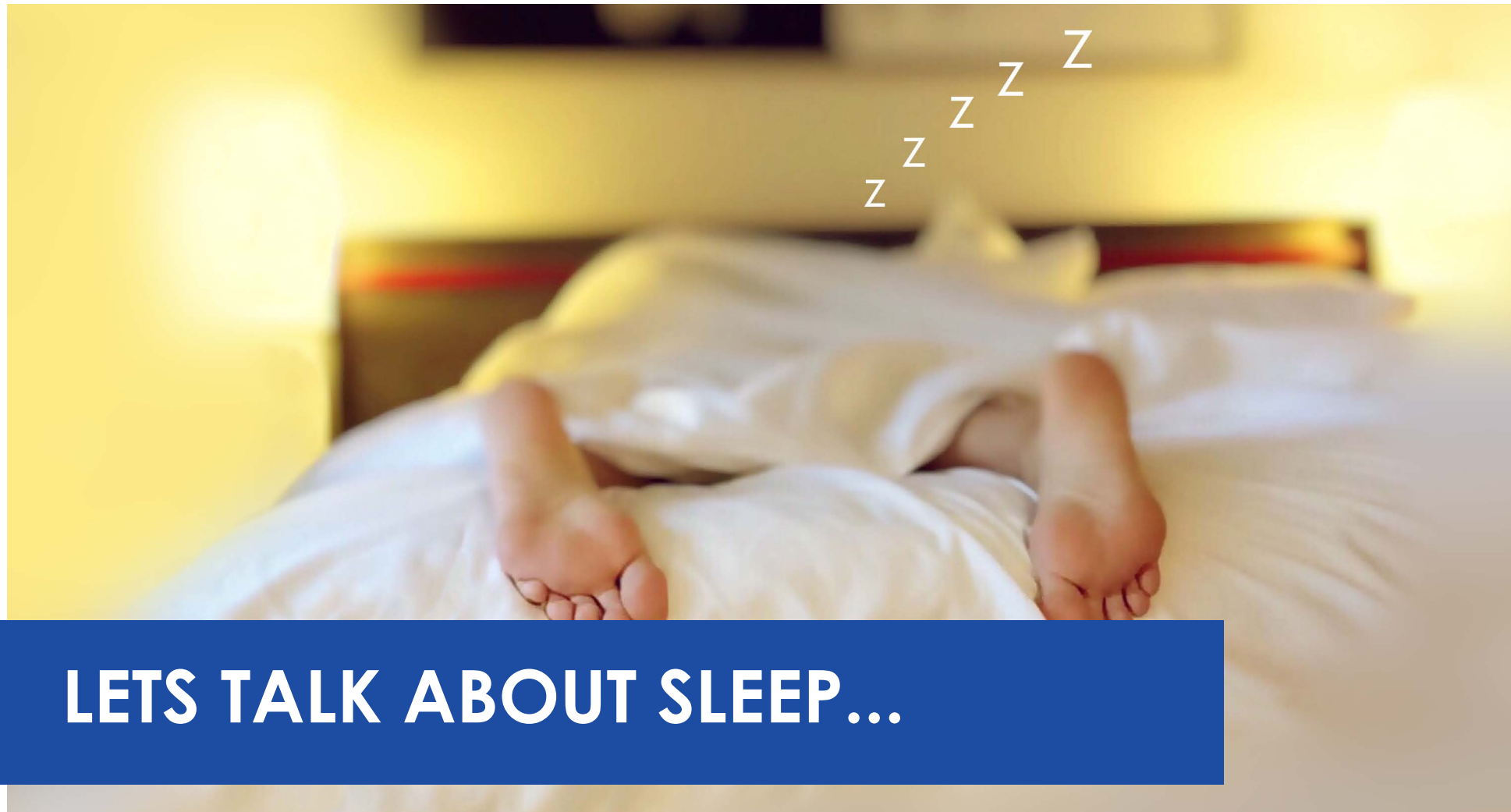
If you are not responding to standard treatment, your osteopath will refer you for further investigation to examine other contributing factors.

What can you do to help?

- Stay active (avoid long periods of rest)
- Avoid activities that cause pain
- Use heat or ice (whichever provides more relief)
- Speak to your pharmacist about non-steroidal anti-inflammatory medication and pain killers
- Do your exercises
- See your local osteopath for manual therapy (spinal manipulation, mobilisation, massage), as these have been shown to reduce pain.

PAIN IS NOT ALWAYS EQUAL TO LEVEL OF DAMAGE & DAMAGE IS NOT ALWAYS EQUAL TO LEVEL OF PAIN





LETS TALK ABOUT SLEEP...

Risks of poor sleep/sleep deprivation

- Increased risk of chronic diseases such as obesity, diabetes, and cardiovascular conditions
- Poor sleep long-term can also reduce your life expectancy
- Poor sleep patterns or sleep deprivation is correlated with decreased pain tolerance. With poor sleep being a predictor of increased pain sensitivity and increases in pain over a 12-month period
- Poor sleep also leads to poorer mood, productivity, and concentration and decision-making

HOW MANY HOURS OF SLEEP WOULD YOU GET EACH NIGHT?

The national sleep foundation recommends a minimum of 7-9 hours each night.

Sleep requirements do vary slightly with age groups, and individual requirements may vary depending on your lifestyle, work, and factors such as stress, and illness.

Your approximate required sleep time is referred to as your basal sleep need.

Your basal sleep need is the number of hours you need to function optimally, and help maintain good health.

When we have nights of sleep deprivation we increase what is called our sleep debt. This sleep debt does not increase in the way monetary debt does, but long term sleep deprivation can have many negative effects on our health....

Overtime we can decrease this sleep debt by having nights of additional sleep. Months of sleep deprivation (such as having a young child) can take weeks to catch up on, with additional sleep. So napping can be beneficial in these situations.

Unfortunately, the risks of sleep deprivation are numerous and can be quite detrimental to our health over the long term.

Benefits of good sleep include:

- Reduced stress
- Improved mood
- Helps you maintain a healthy weight
- Improves your athletic performance
- Improves coordination
- Improves concentration and decision-making
- Improves memory

Help yourself get better sleep & improve your sleep pattern by:

- Set consistent sleep and wake times, even on weekends
- Have a consistent bedtime routine that is not overstimulating
- Create a sleep environment that is quiet, dark, cool, and comfortable. A cooler room will improve sleep, whereas a warm room can hinder sleep.
- Exercise regularly

PHYSICAL ACTIVITY

MORE THAN HALF OF AUSTRALIAN ADULTS PERFORM NO EXERCISE ON A REGULAR BASIS!

Survey data from the Australian Bureau of Statistics revealed that approximately 65% of Australians over the age of 15 years of age had low, or sedentary (practically 'zero') levels of physical activity (Australian Bureau of Statistics, 2013). More than HALF of Australian adults perform NO exercise on a regular basis. I found this staggering! So I did some more research, and thought I would share some of the information with you.

In 2010, Cardiovascular (heart and blood vessel) disease accounted for ¼ (25%) of the burden of disease in Australia (contributing to years of life lost, or premature death).

Physical activity accounted for approximately 20% of the overall risk factors contributing to years of life lost due to cardiovascular disease, with high blood pressure, high Body Mass Index (BMI), smoking, and high cholesterol being other major risk factors (Heart Foundation, 2013)

According to World Health Organisation (2009), of the 19 leading risk factors attributed to early death (across the world), physical inactivity was 8th in low income countries, 4th in middle income countries, and 4th in high income countries. Other risk factors included high blood pressure, smoking, high blood glucose, overweight and obesity, and high cholesterol.

Immediately my mind thinks..."How many of these other risk factors would be reduced or eliminated by increasing physical activity?"



Find something you enjoy doing and do it regularly.

The Australian health guidelines for physical activity & sedentary behaviour are:

- Any exercise or physical activity is better than no activity. Aim to do something, building to regular and more intense exercise as you increase tolerance
- Be active on most, or all days of the week
- Aim to accumulate 2.5-5 hours of moderate intensity exercise, or 1.25-2.5 hours of vigorous (high) intensity exercise, or a combination of both, each week.
- Do muscle strengthening activities at least 2 times each week.
- Minimise prolonged sitting and periods of rest

(Australian Government, 2017)

Physical activity can improve many of the risk factors listed above and has also been shown to help reduce severity of pain, improve physical function, and affect psychological function (Geneen et al., 2017), as well as sleep (Kredlow et al., 2015)



You don't need to be a member of a gym or sports team, or have a heap of exercise equipment at home.

Below are some examples of ways to achieve exercise, as well as ideas of activities of different intensities:

Low intensity

- Walking
- Aqua aerobics
- Yoga
- Pilates
- Tai chi

Moderate to vigorous intensity

- Jogging
- Running
- Pilates
- Weight training
- Swimming
- Tennis
- Team sports
- Gymnastics
- Dance
- Mixed Martial Arts

Even if your work requires you to walk between offices, desks, buildings throughout the day, or if you are at a standing desk all day, this is not classed as being active.



STRETCHES

Cx SB stretch (Side neck stretch) *Right side*

- Using your left hand to hold the head, pull your left ear toward your left shoulder.
- Hold for 15-30 seconds
- Increase this stretch by sitting on your right hand to hold the shoulder down.
- Repeat of on the other side using the right hand to pull the right ear toward the right shoulder



Pec stretch 1 (Chest stretch)

- Place a hand on a solid surface and turn your body away from the hand on the surface.
- Hold for 15-30 seconds
- Repeat on the other side.
- Move the hand higher or lower to target different regions of the chest.



Lev scap (Back of neck stretch) *Right side*

- Using your left hand over the back of the head, pull your face down toward your left pocket. Turn the head more left or right to target different parts until you find the right stretch
- Hold for 15-30 seconds
- Repeat on the other side, using the right hand to draw the head toward the right side.

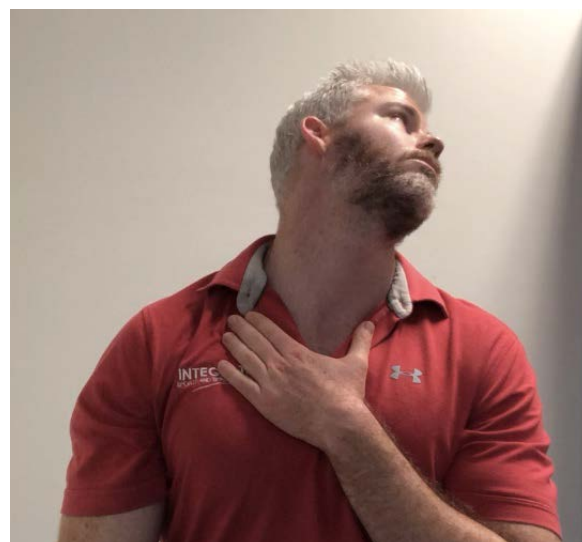


Back stretch 3 and 4 (Back stretch)

- Grasp a solid post/pole/door frame at approximately chest height
- Sit backward away from the post, dropping the torso toward the floor and turning toward the side you are stretching
- Hold for 15-30 seconds
- Repeat on the other side

Front neck stretch *Right side*

- Place your left hand just below your right collar bone and apply a medium pressure to hold the skin/muscle.
- Turn your head toward the left shoulder and tilt your chin up until a stretch is felt on the right side of the neck.
- Hold for 15-30 seconds
- Repeat on the other side, holding the left side of the chest with the right hand, and turning toward the right.



Hip flexor stretch

- Place one knee on the floor, with the other knee bent, the foot flat on the floor (as if proposing J)
- Push the hips forward, leaning back slightly until a stretch is felt in the front of the hip (on the side with the bent knee).
- Increase the stretch by raising the arm (on the side of the stretch) above the head and lean away from that hip).
- Hold for 15-30 seconds
- Repeat on the other side



Hip mobility (Hip joint stretch)

- Place one knee on the floor and the other foot in front, with the knee bent (see image).
- Take the elbow down the inside of the shin, reaching it toward the floor
- A stretch should be felt around the groin and inside of the hip
- Hold for 15-30 seconds
- Repeat on the other side.



Open book (Rotation stretch)

- Lay on the floor with hips and knees bent to 90 degrees and arms reaching out in front.
- Take the top arm and rotate it backward in an arc, rotating the torso as you go.
- Hold for 15-30 seconds.
- Roll onto the other side and repeat.



Hip stretch 1 and 2 (Glute stretch)

- Sitting on a chair or the bed, place one ankle/foot over the other thigh.
- Press the knee down toward the floor and sit forward until a stretch is felt in the buttock.
- Hold for 15-30 seconds
- Repeat on the other side



Tx ext (back & shoulder stretch)

- Get on the floor on hands and knees and reach the hands out in front.
- Sit back onto your heels while pressing your chest toward the floor.
- A stretch should be felt in the chest, or shoulders, and a bending of the middle back should be felt.
- Hold for 15-30 seconds

Low back stretch (Side stretch)

- Standing almost arm-length from the wall, with the wall to the side
- Place the foot farthest from the wall behind the other foot and lean toward the wall.
- Push your hips away from the wall, and bend toward the floor slightly. Rotate your back more or less until a stretch is felt in the low back region or torso.
- Hold for 15-30 seconds.
- Turn around and repeat on the other side.



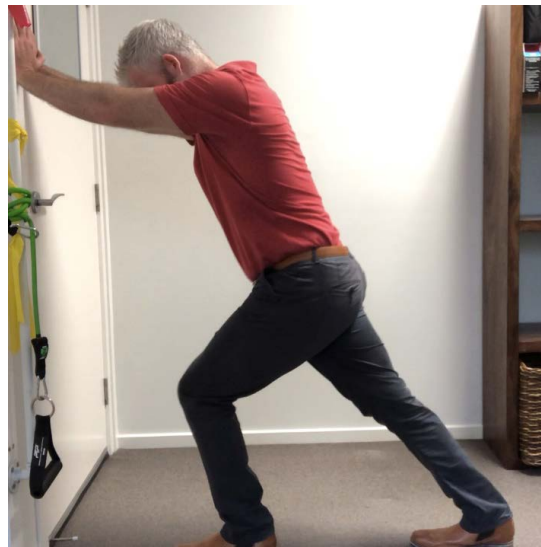
Tx rot stretch (Chair stretch)

- Sitting in a chair, turn in one direction, using the hands to pull your torso into rotation until a stretch is felt through the back
- Hold for 15-30 seconds
- Repeat in the other direction.



Quad stretch (Quadriceps stretch)

- Standing near a wall for support, bend one knee, pulling the foot toward the buttock until a stretch is felt in the front of the thigh.
- Hold for 15-30 seconds.
- Repeat on the other side



Calf stretch

- Standing facing a wall about arm-length away
- Reach one foot backward and press the heel toward the floor. If needed, lean further forward until a stretch is felt in the calf muscle.
- Hold for 15-30 seconds
- Repeat on the other side.

References

- How Much Sleep Do We Really Need. National Sleep Foundation (2018). Retrieved 29/06/2018 from <https://sleepfoundation.org/excessivesleepiness/content/how-much-sleep-do-we-really-need-0>
- Sleep and Tiredness. National Health Service (2018). Retrieved 29/06/2018 from <https://www.nhs.uk/live-well/sleep-and-tiredness/why-lack-of-sleep-is-bad-for-your-health/>
- Davin, S., Wilt, J., Covington, E., & Scheman, J. (2014). Variability in the relationship between sleep and pain in patients undergoing interdisciplinary rehabilitation for chronic pain. *Pain Medicine*, 15(6), 1043-1051. doi:10.1111/pme.12438
- Sivertsen, B., Lallukka, T., Petrie, K. J., Steingrimsdottir, O. A., Stubhaug, A., & Nielsen, C. S. (2015). Sleep and pain sensitivity in adults. *Pain*, 156(8), 1433-1439. doi:10.1097/j.pain.0000000000000131
- Kundermann, B., Schreiber, W. (2004) *The Effects of Sleep Deprivation on Pain*. *Pain Research & Management*, Feb, doi: 10.1155/2004/949187
- Koffel, E., Kroenke, K., Bair, M. J., Leverty, D., Polusny, M. A., Krebs, E. E. *The Bidirectional Relationship Between Sleep Complaints and Pain: Analysis of Data from a Randomized Trial*. *Health Psychology*, 35 (1), 41-49, doi:10.1037/hea0000245



Chris Kinch

OSTEOPATH

0425 876 929

2/2 Classic Way Burleigh Waters QLD 4220

www.integratedsportsandspinalclinic.com

integratedsportsandspinal@gmail.com

INTEGRATED

SPORTS + SPINAL CLINIC
