



Arthritis

Arthritis is a common term used to describe stiffness and degradation of the joints. This article will look at the two main types of arthritis (Osteoarthritis and Rheumatoid-Arthritis); how they progress, what makes them different and how massage can provide a benefit for each type.

Osteoarthritis

This is the most common form of arthritis. As it is caused by wear and tear, it generally affects older people especially in the hands, knees and hips which generally suffer most wear due to day-to-day movement.

Although it largely affects older people, wear on the joints can be increased in younger people through several factors, such as:

Diet: A diet lacking in vitamins and minerals such as Vitamin C, Vitamin D, Omega-3 Oils, Calcium, Manganese and Sulphur can affect the body's ability to maintain the joint. Chronic dehydration can also cause difficulty in maintaining enough Synovial fluid to fully protect and lubricate the joint.

Fitness and weight: The level of fitness of an individual can have a range of effects, including reduced muscle tone that may leave the joint with reduced support causing increased wear. This can be made worse if a person also suffers from excessive weight, especially on the knees and hips which take the brunt of the strain from a person's weight and impact shock from walking. If a person has mainly a sedentary lifestyle, they may also have a reduced blood supply affecting the maintenance of the joint, as well as increasing the effects of Osteoclasts (bone absorption) vs Osteoblast (bone forming) action which can cause a reduction in bone density. Other health issues and illness can have an effect on the joint, for example by using vitamins and minerals for purposes other than maintaining the joint.

Injuries: The joint can be directly affected by an injury that damages its structure. It can also be affected by indirect injuries such as a broken leg which can affect how a person walks which may increase the level of wear to their joints.

Stages of Osteoarthritis

Osteoarthritis is a progressive deterioration of a joint over time. The deterioration is marked by four stages.

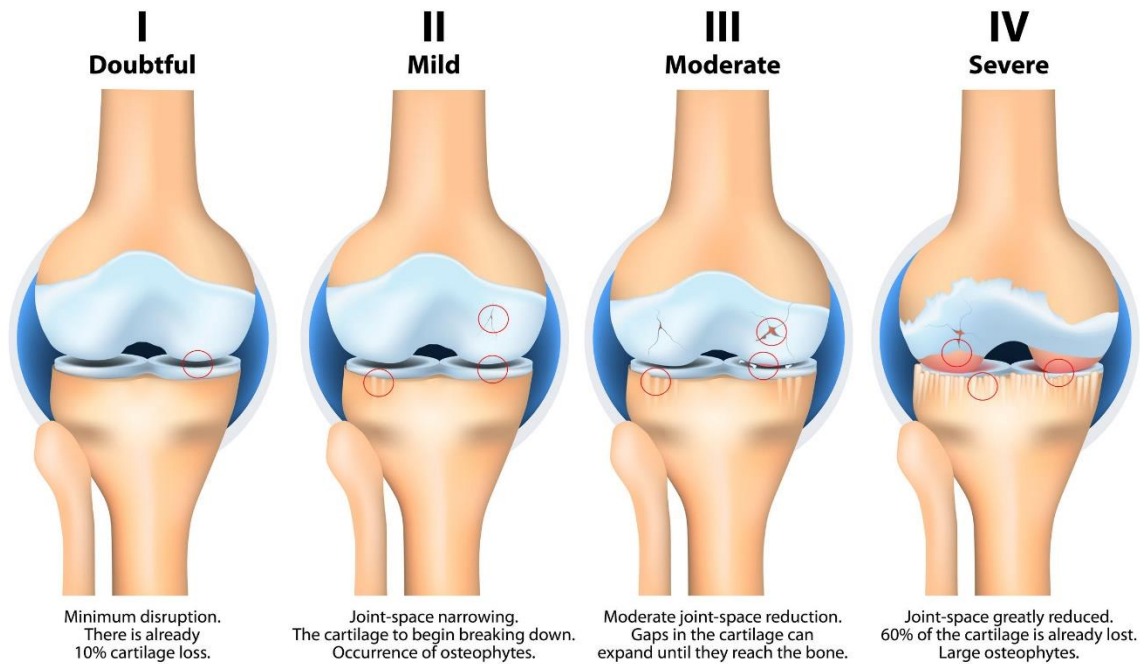
Stage 1: where minor wear has occurred, likely with no symptoms.

Stage 2: is mild arthritis, with x-rays often showing normal cartilage and synovial fluid for joint mobility. This is the first stage that a person is likely to experience symptoms.

Stage 3: is moderate arthritis with cartilage showing signs of damage and the space between bones narrowing. At this point frequent pain during activity is likely and stiffness in the mornings will become noticeable.

Stage 4: is severe arthritis, with discomfort noticeable during any joint movement. The cartilage is substantially reduced, and synovial fluid is decreased, limiting the amount of joint lubrication.

STAGE OF KNEE OSTEOARTHRITIS



How can Massage Help Osteoarthritis?

Massage can provide a range of benefits to Osteoarthritis in the non-acute phase. By using light to medium pressure there is an improved flow of oxygen to the muscles surrounding the joint which helps them to function properly so they can support the joint. Massage will also reduce muscle tension, which will help improve joint mobility and reduce pain in the surrounding muscles. Massage can also stimulate the para-sympathetic nervous system, which helps to reduce stress and anxiety. A person is also likely to see improved joint mobility through passive rotation of the joint.

Whilst several treatments will likely be required to see any benefit, regular massage will help in pain management, maintain mobility and can alleviate stress and anxiety. Taken together, this will allow for a better quality of life with increased mobility and strength. This can be particularly beneficial if Osteoarthritis is affecting the hands. Recipients of massage are also likely to benefit from better sleep which in itself will improve levels of alertness and energy.

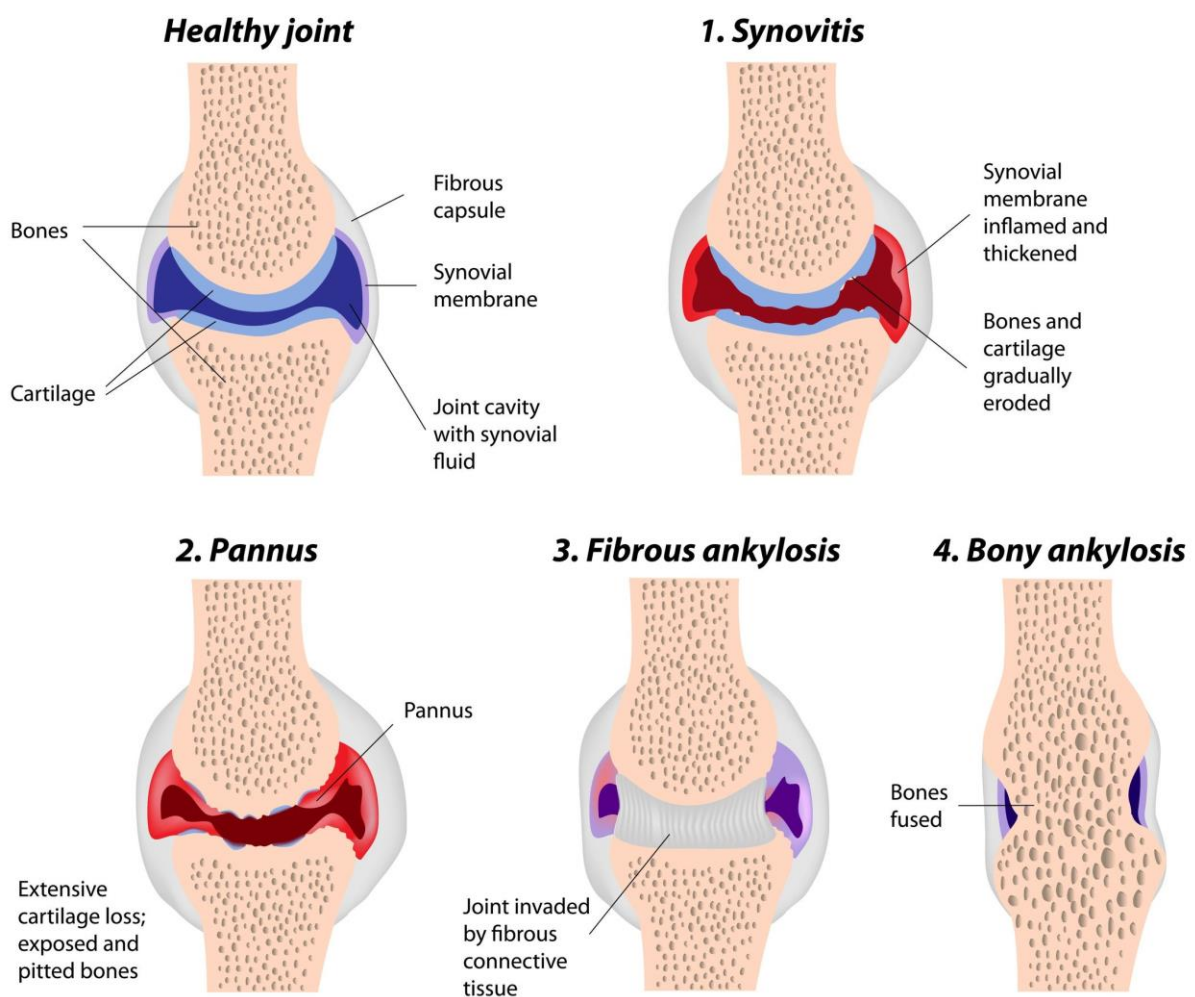


Rheumatoid-Arthritis

Whilst less common, this form of arthritis is an autoimmune disease, caused by an overzealous immune response. It can occur suddenly at any age and cause a great variation in pain and joint damage over weeks, months or even years. In some cases, unlike Osteoarthritis, it can also stop completely, providing only a little damage has occurred to the body and it has a chance to repair itself. Unlike Osteoarthritis, the damage to the cartilage is caused by inflammation of the Synovium membrane that holds the synovium fluid (lubricant) in place around the joint. Like Osteoarthritis there are four stages:

- Stage 1:** The Synovium Membrane becomes inflamed and the joint will appear swollen, but no damage occurs.
- Stage 2:** Moderate Arthritis; the Synovium inflammation is starting to cause the cartilage to deteriorate resulting in pain and mobility issues.
- Stage 3:** Severe Arthritis; the damage has progressed from cartilage to damaging the bones as well; at this point pain will be more pronounced, with mobility issues and muscle weakness, possible deformity may occur at this stage.
- Stage 4:** There is no joint left leaving sufferers with possible pain, mobility loss and muscle weakness. In severe cases the joints may fuse together, known as Ankylosis.

Stages of Rheumatoid Arthritis



Whilst the damage is caused by the immune system, it is not currently known what causes a system that normally protects the body to attack it.

Rheumatoid Arthritis can be affected in a similar way to Osteoarthritis by diet, weight and fitness, and injuries (See Osteoarthritis above for more information on this). For Rheumatoid-Arthritis, a deficiency in omega-3 (known for its anti-inflammatory properties) can increase discomfort.

How can Massage Help Rheumatoid Arthritis?

A study by the University of Miami found that 15 minutes of massage daily helped to reduce pain and anxiety and improve hand grip in patients with hand and wrist arthritis (1). When not in an acute phase, light to medium pressure massage can help to promote blood flow to heal inflamed tissue. It can also ease muscle tension to increase joint mobility, stiffness and reduce pain in the surrounding muscle tissue. Massage can also stimulate the para-sympathetic nervous system to help reduce the level of stress a person is experiencing and promote improvement in sleep.

Over several treatments a recipient is likely to see a reduction in their level of pain, with increased mobility in the affected joints. They should also experience reduced levels of stress and anxiety, and improved quality of sleep which should increase their energy and alertness overall.

Quick Comparison

Osteoarthritis	Rheumatoid-Arthritis
<ul style="list-style-type: none">• Joint Stiffness• Joint Tenderness / pain if affecting fingers• Swelling if affecting the hands/fingers• More pain and stiffness when you have not moved for a while• Joints have a slightly larger or more "knobbly" appearance• Grating or crackling sound or sensation in joints• Limited range of movement• Weakness and muscle wasting (loss of muscle bulk)	<ul style="list-style-type: none">• Joint Stiffness• Joint Pain• Swelling around Joint• Tiredness and a lack of energy• A high temperature• Sweating• Reduced appetite• Weight Loss

Summary

As mentioned previously, there are different types of arthritis, however they all result in degradation of joints and will be familiar to sufferers with joints being swollen, aching and stiff. The two main types are Osteoarthritis (being the most common type) which is due to wear and tear, and Rheumatoid-arthritis which is caused by an auto-immune response that actively attacks the Synovium Membrane around the joints. Both types of arthritis have four stages of progression with symptoms worsening at each stage. Osteoarthritis can be slowed down with lifestyle and dietary changes, whilst Rheumatoid arthritis requires medical intervention to slow it down. The symptoms of both types can be alleviated during their non-acute phase through light massage and passive mobilisation.

Copyright

All images used in this article are licenced through 123rf.com and cannot be reused.

References

1. Susan Bernstein and Mary Anne Dunkin “Benefits of Massage” Arthritis Foundation. Available at: <https://www.arthritis.org/health-wellness/treatment/complementary-therapies/natural-therapies/benefits-of-massage> (Accessed: 07/02/2020)
2. Chris B (05/08/2013) “Massage & Rheumatoid Arthritis” American Massage Therapy Association. Available at: <https://www.amtamassage.org/articles/3/MTJ/detail/2807/massage-rheumatoid-arthritis> (Accessed: 07/02/2020)
3. Reviewed by Katherine Marengo (22-02-2019) “Eating Right for Osteoarthritis (OA) of the Knee” Healthline. Available at: <https://www.healthline.com/health/osteoarthritis/osteoarthritis-diet#omega-fatty-acids> (Accessed: 15/02/2020)
4. Catherine Lovering Reviewed by Dr Nancy Carteron (11/02/2019) “Four Stages and Progression of Rheumatoid Arthritis” Healthline. Available at: <https://www.healthline.com/health/rheumatoid-arthritis/stages-and-progression#stages> (Accessed: 09/02/2020)
5. (28/08/2019) “Rheumatoid arthritis” NHS. Available at: <https://www.nhs.uk/conditions/rheumatoid-arthritis/symptoms/> (Accessed: 22/02/2020)
6. “Rheumatoid arthritis” Arthritis Action. Available at: <https://www.arthritisaction.org.uk/living-with-arthritis/what-is-arthritis/rheumatoid-arthritis/> (Accessed: 22/02/2020)
7. (19/08/2019) “Osteoarthritis” NHS. Available at: <https://www.nhs.uk/conditions/osteoarthritis/symptoms/> (Accessed: 22/02/2020)
8. “Osteoarthritis” Arthritis Action. Available at: <https://www.arthritisaction.org.uk/living-with-arthritis/what-is-arthritis/osteoarthritis/> (Accessed: 22/02/2020)
9. Kimberly Holland Reviewed by Dr William Morrison (23/07/2018) “Stages of Osteoarthritis of the Knee” Healthline. Available at: <https://www.healthline.com/health/osteoarthritis-stages-of-oa-of-the-knee> (Accessed: 22/02/2020)
10. Dr Chris Iliades Reviewed by Dr Rosalyn Carson-DeWitt (16/04/2018) “How Massage Therapy Helps Relieve Osteoarthritis Pain” Everyday Health. Available at: <https://www.everydayhealth.com/osteoarthritis/massage-therapy-for-osteoarthritis.aspx> (22/02/2020)
11. Ashley Boynes-Shuck (14/09/2014) “Go Ahead, Try Massage Therapy for RA Joint Pain” Healthline. Available at: <https://www.healthline.com/health-news/massage-for-arthritis-joint-pain-091414> (Accessed: 22/02/2020)
12. Madeline R. Vann Reviewed by Dr Alexa Meara (17/01/2017) “How Massage Helps Ease Rheumatoid Arthritis Pain” Everyday Health. Available at: <https://www.everydayhealth.com/rheumatoid-arthritis/treatment/why-you-should-get-a-massage-for-ra-pain-relief/> (Accessed: 22/02/2020)
13. Kathleen Yale (18 May 2015) “The Skeletal System: Crash Course A&P #19” Timeframe: 6:00 – 9:15. Available at: <https://www.youtube.com/watch?v=rDGqkMHPDqE> (Accessed: 14/11/2020)