

# THE USE OF WRIST SPLINTS IN RHEUMATOID ARTHRITIS

## INTRODUCTION

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Rheumatoid arthritis is one of a group of conditions known as *Inflammatory arthritides* (= plural of *arthritis*). These are conditions in which the body's immune system malfunctions and causes inflammation in the joints. This results in *pain, heat, redness, swelling, and stiffness* in the joints.

## JOINTS AFFECTED

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Rheumatoid arthritis affects a large number of joints, but mainly the *small joints of the hands and feet*. The wrists are often affected by pain and swelling. This is important because when the wrist is tender, any movements of the hand also become painful. This has the effect of weakening the entire hand, and reducing the grip strength.

## OTHER SYMPTOMS

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Rheumatoid arthritis may affect a wide variety of joints, but also causes other symptoms such as fatigue, weight loss, low-grade fevers, and chest pains. A proper evaluation by a Consultant Rheumatologist is vital.

## TREATMENT

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Treatment of rheumatoid arthritis involves a full and comprehensive assessment from a specialist at the outset. A number of drugs may be necessary, including anti-inflammatory tablets, glucocorticoids (steroids), and immunosuppressants. Treatment is usually required in the long term in order to control the disease.

## WRIST SPLINTS

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Wrist splints can help considerably to improve the function of the hand in rheumatoid arthritis. By stabilizing a swollen and painful wrist, they allow the fingers and thumbs to move normally.

There are a number of different splints available. Some have a removable metal bar, which gives stability. The splint will prevent any flexion or extension of the wrist, but allow the twisting movements that are so important for hand function. Sometimes the

metal bar can be uncomfortable – in this case it can be bended to shape, or removed entirely.

Some wrist splints are designed to leave the thumb completely free, but others give support to the thumb. These are particularly useful for people who have osteoarthritis at the base of the thumb. Supporting the painful joint leaves the rest of the thumb free to move, and improves the strength of the all-important pinch-grip.

## HAND THERAPY

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It is often necessary to have an assessment from a specialist therapist – either occupational therapy or physiotherapy – who will be able to assess hand function and choose what type of splint would suit the individual person best.

They will also be able to help assess which daily activities are particularly difficult; there are a range of “gadgets” available that can help people with hand problems – for example in the kitchen.

## WHEN TO USE

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Splints are not meant to be used all of the time. Overuse of splints can in fact make matters worse by leading to muscle loss and,

in the long run, thinning of the underlying bones (osteoporosis).

It is best to use the splints when performing activities involving repetitive movements (e.g. computer work), or those that require a degree of grip strength.

### CARPAL TUNNEL SYNDROME

Carpal tunnel syndrome is a relatively common complaint caused by pressure on the median nerve as it passes through the wrist. Symptoms range from numbness, pins and needles through to pain and weakness in the hand.

Carpal tunnel syndrome is particularly common in rheumatoid arthritis, and is more likely to affect both hands. Sometimes, carpal tunnel syndrome may be the first symptom of rheumatoid arthritis – so if other symptoms develop (particularly swelling of the hand and wrist joints), it is important to obtain a proper assessment from a Consultant Rheumatologist.

Wrist splints play an important role in treating carpal tunnel syndrome, as they can hold the wrist in such a position as to relieve some of the pressure on the nerve. It is often helpful to wear them at night, in order to help the swelling go down.

### INJECTIONS

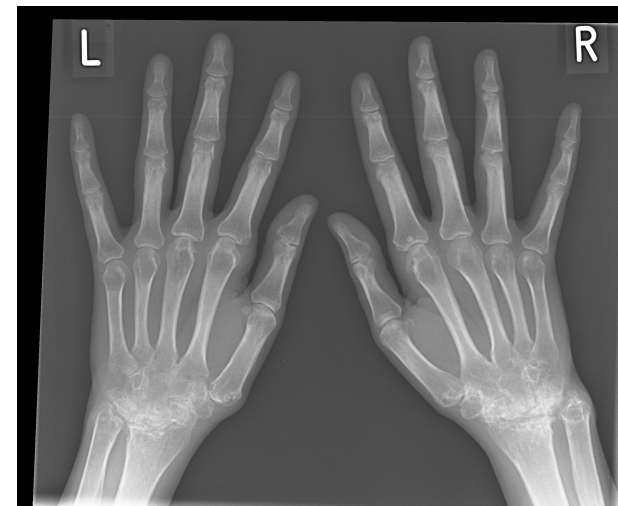
Rheumatologists and orthopaedic surgeons often inject some steroid directly into a joint or around a tendon. Steroids are powerful anti-inflammatories, and can help the swelling to reduce. This is particularly useful in rheumatoid arthritis, and can often be done in carpal tunnel syndrome as a way of trying to avoid surgery.

Your doctor may recommend that a splint is worn for a period of time after an injection is performed, in order to maximize the potential benefit.

### SUMMARY

Painful swollen wrists are a common and difficult problem in rheumatoid arthritis, as many aspects of hand function may be compromised. Wrist splints can improve matters by supporting the painful area, but allowing the rest of the hand to move.

Your doctor and therapist will help you to choose the correct one, and advise on what further treatments may be necessary.



*X-ray of hands and wrists affected by rheumatoid arthritis.*

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