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Palindromic rheumatism

This booklet provides information and answers to your questions about this condition.
Palindromic rheumatism is a form of inflammatory arthritis that causes attacks of joint pain and inflammation. It’s different from other types of inflammatory arthritis because people with palindromic rheumatism usually have no symptoms in between attacks. In this booklet we’ll explain the causes and symptoms of palindromic rheumatism, and we’ll look at treatments and what you can do to help yourself.

At the back of this booklet you’ll find a brief glossary of medical words - we’ve underlined these when they’re first used.
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What is palindromic rheumatism?
Palindromic rheumatism causes attacks of joint pain and inflammation which keep coming and going. The joints appear normal between attacks.

What are the symptoms?
During an attack:
• affected joints and tendons feel painful and stiff and may be hot, tender and swollen
• the skin over affected joints may look red or there may be a nodule under the skin
• you may feel tired, unwell and even feverish.

In between attacks, people with palindromic rheumatism usually feel well.

How is it diagnosed?
There’s no specific test for palindromic rheumatism. The diagnosis will be made based on your symptoms and, if possible, a physical examination during an attack. This will also help rule out other forms of arthritis. Taking a photo of the affected joints during an attack may be helpful.

What treatments are there?
Depending on your symptoms, you may be given some or all of the following treatments:
• non-steroidal anti-inflammatory drugs (NSAIDs)
• steroid injections
• disease-modifying anti-rheumatic drugs (DMARDs)

Blood tests and x-rays may also be helpful in providing support for the diagnosis and for ruling out other conditions.
How can I help myself?

During an attack, you should rest your joints and pace your activities to reduce fatigue. Take advice from your doctor about increasing your medication to reduce your symptoms. You can also use ice or heat pads to help ease pain. Once severe pain has settled down, you should get moving again.

In between attacks you should be able to carry out your everyday activities. You should keep to a healthy weight to avoid putting strain on your joints and find the right balance for you between rest and exercise.
What is palindromic rheumatism?
Palindromic rheumatism is a form of inflammatory arthritis. It’s also known as palindromic arthritis. People who have it get attacks of joint pain and inflammation. These flare-ups start in one joint but may spread to others before settling down completely. The joints appear normal between attacks.

Palindromic rheumatism gets its name from the term ‘palindrome’. A palindrome is a word or phrase which reads the same forwards or backwards (for example ‘level’ or ‘madam’). A typical palindromic attack begins and ends in the same way and is at its worst point during the middle.

What are the symptoms of palindromic rheumatism?
People with palindromic rheumatism usually have no symptoms in between attacks. This sets palindromic rheumatism apart from other forms of inflammatory arthritis such as rheumatoid arthritis. People with these conditions have joint problems most of the time, although the level of problem may vary.

During an attack of palindromic rheumatism, the joints involved are painful, stiff and often swollen. They may also be tender and hot, and the skin over the joint may look red. The area around the joint (called the periarticular area) and the tendons may also be inflamed, painful and swollen (see Figure 1).
What are attacks of palindromic rheumatism like?
Usually attacks start in one or two joints, which quickly become painful, stiff and swollen. Tendons and areas around the affected joints may also be involved. Typically the joints involved at the start improve after a short period, but the attack moves from joint to joint, building up to its worst point. Finally the attack disappears and the joints and tendons return to normal. No matter how often they occur, these attacks don’t cause damage to the joint. Although people with palindromic rheumatism are generally well between attacks, some have reported fatigue following their attacks which may continue for a few days or weeks.

Attacks of palindromic rheumatism come and go over time, but the pattern of attacks – how often they happen, how long they last and what joints are involved – is different for everyone. Some people get less than one attack a year but others get attacks more than once a week. Some people’s attacks last only a few hours but for others they may last several days. You may notice that your attacks have a repeating pattern.

Does palindromic rheumatism affect other parts of the body?
During an attack some people feel generally unwell and experience fatigue. Some people may even have a mild fever or get nodules under the skin near affected joints. Apart from this, palindromic rheumatism usually doesn’t affect parts of the body outside the joints and tendons.
What causes palindromic rheumatism?

Because palindromic rheumatism is rare, there hasn’t been very much research into the condition. However, studies have shown that inflammatory cells move into the lining of the joint, which causes the classic features of inflammation – redness, swelling and the production of extra fluid (see Figures 2 and 3) – which is very similar to what you see when you get a cut or wound in your skin. It’s likely that similar changes affect involved tendons, areas around the affected joints and the skin.

We don’t yet know what triggers this inflammation. Although there may be genetic links, this isn’t the whole story – it may be that other triggers play a part, such as infection, hormones or trauma.

Unlike many other rheumatic diseases, palindromic rheumatism affects both men and women equally and can occur at any age.

How is palindromic rheumatism diagnosed?

There’s no specific test for palindromic rheumatism so a diagnosis is based on your symptoms. Your doctor may also ask questions and examine you to help rule out other forms of inflammatory arthritis like rheumatoid arthritis or gout. It may help if they can examine you during an attack because symptoms disappear once the attack has finished.
Taking a photo of the affected joints during an attack may be helpful. If the picture is good enough quality, it may help your doctor make a diagnosis.

**What tests are there?**
Blood tests like the erythrocyte sedimentation rate (ESR) and the C-reactive protein (CRP) can show raised levels of inflammation in the body during an attack. Other blood tests can check for antibodies such as rheumatoid factor, anti-CCP antibodies and anti-nuclear antibodies.

X-rays of affected areas will be normal as palindromic rheumatism doesn’t damage your joints.

**What is the outlook?**
Palindromic rheumatism varies a great deal from person to person so it’s impossible to predict what to expect. In the longer term, about 10–15% of people find their symptoms completely disappear and another 30–50% have only occasional attacks. The remaining 30–40% of people have greater problems over time. Some of these people may later develop rheumatoid arthritis. This is particularly likely in people whose blood tests show rheumatoid factor or anti-CCP, which are positive in rheumatoid arthritis. It’s very important to note, however, that not everyone with palindromic rheumatism who is positive for these antibodies will develop rheumatoid arthritis. Very rarely, a small number of people...
Different types of drugs can be used to treat palindromic rheumatism. The response may vary for different people and it’s important to work with your doctors to find the best treatment for you.

DMARDs tackle the causes of joint inflammation. They’re used to reduce how often you have attacks and how bad they are.
develop lupus. This is more likely in people whose blood tests show anti-nuclear antibodies, which are present in lupus.

Attacks of palindromic rheumatism don’t damage your joints, but damage may occur in people who go on to develop rheumatoid arthritis.

See Arthritis Research UK booklets
tLupus (SLE); Rheumatoid arthritis.

What treatments are there for palindromic rheumatism?

Palindromic rheumatism is very rare, so your GP may not have seen many cases. It can sometimes be confused with conditions like rheumatoid arthritis, where early treatment is vital to prevent joint damage. Because of this, your GP should refer you to a specialist rheumatologist to confirm the diagnosis.

Once the diagnosis has been confirmed, you’re likely to be looked after in a shared care system by your GP and a specialist rheumatologist (possibly with a rheumatology nurse specialist). They’ll need to monitor your condition to make sure you’re not developing an ongoing form of inflammatory arthritis like rheumatoid arthritis, as this would need more intensive treatment.

There are no controlled studies (studies where drug treatments are assessed against a placebo) of treatments in palindromic rheumatism. Treatments are based on observational studies (studies assessing how treatments performed in a series of patients) and on doctors’ previous experience of the condition.

Drugs

Different types of drugs can be used to treat palindromic rheumatism. The response may vary for different people and it’s important to work with your doctors to find the best treatment for you (see Figure 4).

<table>
<thead>
<tr>
<th>Type of drug</th>
<th>Effect</th>
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<tbody>
<tr>
<td>Non-steroidal anti-inflammatory drugs (NSAIDs)</td>
<td>NSAIDs are used to reduce pain and inflammation during the attacks. Examples include diclofenac, naproxen and ibuprofen.</td>
</tr>
<tr>
<td>Steroid injections</td>
<td>Steroid injections can bring fast relief to an inflamed joint.</td>
</tr>
<tr>
<td>Disease-modifying anti-rheumatic drugs (DMARDs)</td>
<td>Drugs such as hydroxychloroquine, sulfasalazine and occasionally methotrexate can be used to prevent attacks or reduce their frequency in people with more serious disease.</td>
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Non-steroidal anti-inflammatory drugs (NSAIDs)
Non-steroidal anti-inflammatory drugs block the inflammation that occurs in the lining of your joints and can be very effective in controlling pain and stiffness. Your symptoms will improve when you take these drugs, but the effects aren’t long-lasting so you have to take the tablets regularly. You’ll need to take them as soon as an attack starts and then continue until after it’s finished. Some people who have a lot of attacks find it works better to take them all the time.

Some people find that a particular NSAID works well for a while but then becomes less effective. If this happens, it sometimes helps to try a different NSAID. There are many NSAIDs available, and your doctor will advise you on the best choices for you.

NSAIDs can sometimes have side-effects, but your doctor will try to reduce the risk of these, for example by prescribing the lowest effective dose for the shortest possible time.

NSAIDs can cause digestive problems (stomach upsets, indigestion or damage to the lining of the stomach) so they’re often prescribed along with a drug called a proton pump inhibitor (PPI) such as omeprazole or lansoprazole, which will help to protect the stomach.

NSAIDs also carry an increased risk of heart attack or stroke. Although the increase in risk is small, your doctor will be cautious about prescribing NSAIDs if there are other factors that may increase your overall risk, for example smoking, circulation problems, high blood pressure, high cholesterol or diabetes.

Steroid injections
Your doctor might recommend local steroid injections if your joints are particularly painful or your ligaments and tendons have become inflamed.

Injections aren’t given regularly, but you may be given them if you have one or more very inflamed joint/tendon. They usually work within a few days. Some GPs give them but they’re usually given by your consultant team in hospital.

See Arthritis Research UK drug leaflet Non-steroidal anti-inflammatory drugs (NSAIDs).

See Arthritis Research UK drug leaflet Local steroid injections.
Disease-modifying anti-rheumatic drugs (DMARDs)

Disease-modifying anti-rheumatic drugs help by tackling the causes of joint inflammation. They’re used in severe cases of palindromic rheumatism to reduce symptoms and flare-ups. There’s also some evidence that they can reduce how often attacks happen or delay the onset of rheumatoid arthritis, so they’re often used for this purpose too, especially in patients with severe or frequent attacks. It may be some time before DMARDs start to have an effect on your joints, so you should take them regularly.

The most common DMARDs used to prevent attacks in palindromic rheumatism are hydroxychloroquine and sulfasalazine because they have fewer side-effects than some other DMARDs.

However, people with severe disease may need stronger DMARDs like methotrexate.

When taking DMARDs you’ll generally need to have regular blood monitoring to check for possible side-effects, including problems with your liver, kidneys or blood count.

You can take NSAIDs along with DMARDs.

See Arthritis Research UK drug leaflets Hydroxychloroquine; Methotrexate; Sulfasalazine.
What can I do to help myself?
There are things you can do which may help ease your symptoms and also help with your daily activities.

What should I do during an attack?
When the pain is severe, you should rest your joints. Wrist splints and insoles for your shoes may be helpful.

You may need to increase your medication with advice from your doctor or rheumatology nurse specialist.

Ice or heat pads (for example a bag of frozen peas or a hot-water bottle) can also help ease pain and swelling, although you should take care to not apply them directly to your skin. Relaxation exercises and swimming or bathing in warm water can also help.

Pacing your activities will help conserve energy and reduce fatigue.

Once severe inflammation has settled down, you should get moving again.

Self-help and daily living
Exercise
Exercise is important to keep your joints working properly but you may feel too tired during attacks. You’ll need to find out for yourself the right balance between rest and exercise. Your doctor or
a physiotherapist will be able to give you advice on suitable forms of exercise such as stretching exercises and hydrotherapy (exercises in warm water).

See Arthritis Research UK booklets Hydrotherapy and arthritis; Keep moving; Physiotherapy and arthritis.

Diet and nutrition
No specific diets have been found to affect palindromic rheumatism, but being overweight will put extra strain on your joints. Keeping an eye on your weight and eating a healthy, balanced diet with plenty of fresh fruit and vegetables are recommended for your general health.

There’s limited evidence that, in a small number of people with palindromic rheumatism, a particular food appears to trigger attacks. If you think this may be the case for you, you can explore the link using a food diary and/or an elimination diet in which you stop eating that food. If you decide to try an elimination diet, we recommend that you speak to a registered dietitian who can make sure you’re cutting out foods completely and check that you’re not missing out on important nutrients.

See Arthritis Research UK booklet Diet and arthritis.

Complementary medicine
There’s little evidence about complementary medicine in palindromic rheumatism. Some people find that fish oils reduce their need for NSAIDs because they have a mildly anti-inflammatory effect. We recommend taking pure fish body oil rather than fish liver oil.

If you want to try complementary medicines or therapies, it’s important to go to a legally registered therapist, or one who has a set ethical code and is fully insured. You should also discuss the issue with your doctor or rheumatology nurse specialist in case any of the complementary medicines might interact with the medications they’re giving you. When you’re thinking about whether to continue with complementary treatments, base your decision on whether you notice any improvement.

See Arthritis Research UK booklets Complementary and alternative medicines for arthritis.
Work
People with mild palindromic rheumatism are unlikely to have big problems with work. However, those who have attacks more often or who have worse attacks may experience some difficulties. It may be possible to adapt your work, for example to work shorter hours or move to a less physically demanding role. If this isn’t possible, you may need a work assessment and retraining, which can be arranged through your local Jobcentre Plus.

If you’re unable to work or have mobility problems, benefits are available. A health or social worker or your local Citizens Advice Bureau will be able to advise you on benefits you can claim.

See Arthritis Research UK booklets
Work and arthritis.

Sex and pregnancy
You may not feel like having sex during attacks because of fatigue and pain, but in between them you should be able to have a normal sex life.

There’s no evidence that palindromic rheumatism itself affects your chances of having a family, but medication, especially DMARDs such as sulfasalazine or methotrexate, may have an important impact. NSAIDs aren’t generally recommended during pregnancy and some recent studies suggest that the risk of miscarriage may be increased if you take NSAIDs around the time of conception. If you’re thinking about starting a family, you should discuss your drug treatment with your doctor well in advance so that your medications can be changed if necessary.

See Arthritis Research UK booklets
Pregnancy and arthritis; Sex and arthritis.

Living with palindromic rheumatism
You can help your family and friends to understand your condition by discussing it with them and by showing them this booklet.

Any long-term condition can affect your moods, emotions and confidence, and it can have an impact on your work, social life and relationships. Talk things over with a friend, relative or your doctor if you find your condition is getting you down. Some charities, such as Arthritis Care, also run helplines and online discussion groups which you may find useful.

Research and new developments
There has been little research in palindromic rheumatism up to now because it’s rare and sometimes not diagnosed early. However, new techniques in genetics and imaging have proved very effective in understanding other forms of inflammatory arthritis. Some of these studies may also be relevant to palindromic rheumatism and lead to better treatments.
You can help your family and friends to understand your condition by discussing it with them and by showing them this booklet.
Glossary

**Antibodies** – blood proteins that form in response to germs, viruses or any other substances that your body sees as foreign or dangerous. Antibodies attack these foreign substances and make them harmless.

**C-reactive protein (CRP)** – a protein found in the blood. The level of C-reactive protein in the blood rises in response to inflammation and a blood test for the protein can therefore be used as a measure of inflammation or disease activity.

**Disease-modifying anti-rheumatic drugs (DMARDs)** – drugs used in rheumatoid arthritis and some other rheumatic diseases to suppress the disease and reduce inflammation. Unlike painkillers and non-steroidal anti-inflammatory drugs (NSAIDs), DMARDs treat the disease itself rather than just reducing the pain and stiffness caused by the disease. Examples of DMARDs are methotrexate, sulfasalazine, gold, infliximab, etanercept and adalimumab.

**Erythrocyte sedimentation rate (ESR)** – a test that shows the level of inflammation in the body. Blood is separated in a machine with a rapidly rotating container (a centrifuge), then left to stand in a test tube. The ESR test measures the speed at which the red blood cells (erythrocytes) settle.

**Fatigue** – a feeling of weariness that’s more extreme than simple tiredness. It can affect you physically, but it can also affect your concentration and motivation, and often comes on for no apparent reason and without warning.

**Flare-up** – a period where your joints become inflamed and painful, sometimes known as a ‘flare’.

**Gout** – an inflammatory arthritis caused by a reaction to the formation of urate crystals in the joint. Gout comes and goes in severe flare-ups at first, but if not treated it can eventually lead to joint damage. It often affects the big toe.

**Inflammation** – a normal reaction to injury or infection of living tissues. The flow of blood increases, resulting in heat and redness in the affected tissues, and fluid and cells leak into the tissue, causing swelling.

**Inflammatory arthritis** – a group of conditions characterised by inflammation, usually of the synovium (the lining of the joint). Types of inflammatory arthritis include rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis.

**Ligament** – a tough, fibrous band that anchors the bones on either side of a joint and holds the joint together.
spine they’re attached to the vertebrae and restrict spinal movements, therefore giving stability to the back.

**Lupus (systemic lupus erythematosus or SLE)** – an autoimmune disease in which the immune system attacks the body’s own tissues. It can affect the skin, the hair and joints and may also affect internal organs. It’s often linked to a condition called antiphospholipid syndrome (APS).

**Nodule (rheumatoid nodule)** – a small lump of tissue which forms under the skin. Nodules are most common on the elbows, where they’re usually painless. Although they’re less common on the feet they tend to be more troublesome when they develop there.

**Non-steroidal anti-inflammatory drugs (NSAIDs)** – a large family of drugs prescribed for different kinds of arthritis that reduce inflammation and control pain, swelling and stiffness. Common examples include ibuprofen, naproxen and diclofenac.

**Placebo** – a fake or dummy treatment used in clinical trials, against which the real treatment is compared. A placebo is indistinguishable from the real substance so that participants in the trial don’t know whether they’ve received the real or the fake treatment.

**Rheumatoid arthritis** – an inflammatory disease affecting the joints, particularly the lining of the joint. It most commonly starts in the smaller joints in a symmetrical pattern – that is, for example, in both hands or both wrists at once.

**Rheumatologist** – a hospital specialist with an interest in autoimmune diseases and diseases of joints, bones and muscles.

**Tendon** – a strong, fibrous band or cord that anchors muscle to bone.

**Where can I find out more?**
If you’ve found this information useful you might be interested in these other titles from our range:

**Conditions**
- Lupus
- Rheumatoid arthritis

**Therapies**
- Hydrotherapy and arthritis
- Physiotherapy and arthritis

**Self-help and daily living**
- Complementary and alternative medicines for arthritis
- Fatigue and arthritis
- Keep moving
- Pain and arthritis
- Pregnancy and arthritis
- Sex and arthritis
- Work and arthritis
Drugs
• Hydroxychloroquine
• Local steroid injections
• Methotrexate
• Non-steroidal anti-inflammatory drugs (NSAIDs)
• Sulfasalazine

You can download all of our booklets and leaflets from our website or order them by contacting:

Arthritis Research UK
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St Mary’s Court
St Mary’s Gate, Chesterfield
Derbyshire S41 7TD
Phone: 0300 790 0400
www.arthritisresearchuk.org

Related organisations
The following organisations may also be able to provide additional advice and information:

Arthritis Care
Floor 4, Linen Court
10 East Road
London N1 6AD
Phone: 020 7380 6500
Helpline: 0808 800 4050
Email: info@arthritiscare.org.uk
www.arthritis.org.uk

Citizens Advice Bureau
To find your local office, see the telephone directory or Yellow Pages under ‘Citizens Advice Bureau’ or contact Citizens Advice:
Phone (for England): 0844 411 1444
Phone (for Wales): 0844 477 2020
www.citizensadvice.org.uk
www.advice.org.uk
www.advice4me.org.uk (for under 25s)

Links to sites and resources provided by third parties are provided for your general information only. We have no control over the contents of those sites or resources and we give no warranty about their accuracy or suitability. You should always consult with your GP or other medical professional.

Please note: We’ve made every effort to make sure that this content is correct at time of publication. If you would like further information, or if you have any concerns about your treatment, you should discuss this with your doctor, rheumatology nurse or pharmacist.
We’re here to help

Arthritis Research UK is the charity leading the fight against arthritis.

We’re the UK’s fourth largest medical research charity and fund scientific and medical research into all types of arthritis and musculoskeletal conditions.

We’re working to take the pain away for sufferers with all forms of arthritis and helping people to remain active. We’ll do this by funding high-quality research, providing information and campaigning.

Everything we do is underpinned by research.

We publish over 60 information booklets which help people affected by arthritis to understand more about the condition, its treatment, therapies and how to help themselves.

We also produce a range of separate leaflets on many of the drugs used for arthritis and related conditions. We recommend that you read the relevant leaflet for more detailed information about your medication.

Please also let us know if you’d like to receive our quarterly magazine, *Arthritis Today*, which keeps you up to date with current research and education news, highlighting key projects that we’re funding and giving insight into the latest treatment and self-help available.

We often feature case studies and have regular columns for questions and answers, as well as readers’ hints and tips for managing arthritis.

Tell us what you think

Please send your views to feedback@arthritisresearchuk.org or write to us at:
Arthritis Research UK, Copeman House, St Mary’s Court, St Mary’s Gate, Chesterfield, Derbyshire S41 7TD

A team of people contributed to this booklet. The original text was written by Prof. Gabrielle Kingsley, who has expertise in the subject. It was assessed at draft stage by consultant rheumatologist Dr Andy Hassell and GP with special interest in musculoskeletal medicine Dr Sean Macklin. An *Arthritis Research UK* editor revised the text to make it easy to read, and a non-medical panel, including interested societies, checked it for understanding. An *Arthritis Research UK* medical advisor, Prof. Anisur Rahman, is responsible for the overall content.
Get involved

You can help to take the pain away from millions of people in the UK by:

• volunteering
• supporting our campaigns
• taking part in a fundraising event
• making a donation
• asking your company to support us
• buying gifts from our online and high-street shops.

To get more actively involved, please call us on 0300 790 0400, email us at enquiries@arthritisresearchuk.org or go to www.arthritisresearchuk.org