Drugs and Arthritis

‘Arthritis’ means inflammation of joints. Many different drugs are used in its treatment. The purpose of this information sheet is to:

- describe the role of drugs in the treatment of arthritis
- introduce the main groups of drugs used.

Different types of arthritis are treated with different drugs. For example, for gout and arthritis due to an infection in a joint (septic arthritis) there are very specific drugs. For other types of arthritis, such as rheumatoid arthritis, there is at present no drug to cure the disease. Many different drugs can help significantly and may halt the progress of the arthritis. So, for rheumatoid arthritis, your doctor will often need to give you two or more drugs together, or to try one drug first and if this does not work to try another. Painkillers (called ‘analgesics’) and anti-inflammatory drugs are used to relieve the symptoms of degenerative, or ‘wear and tear’, arthritis (osteoarthritis).

Drugs used to treat arthritis

Some drugs control symptoms. For example, analgesics reduce pain and anti-inflammatory drugs reduce swelling and stiffness. Other drugs affect the disease itself. A combination of drugs may be used to treat arthritis.

<table>
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<th>Examples of drugs used to treat arthritis</th>
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| **1. Drugs which control symptoms of the disease**  
  (used for most types of arthritis, including osteoarthritis) |
| **Type of drug** | **Examples** |
| Painkillers (analgesics) | Paracetamol  
  Dihydrocodeine  
  Co-proxamol  
  Paracetamol and codeine combined,  
  e.g. co-codamol |
| Non-steroidal anti-inflammatory drugs (NSAIDs) | Aspirin  
  Ibuprofen  
  Naproxen  
  Indomethacin  
  Diclofenac  
  Meloxicam  
  Rofecoxib  
  Celecoxib |
| **2. Drugs which can affect the disease itself** |
| **Type of arthritis** | **Drugs** |
| Rheumatoid arthritis | Methotrexate  
  Sulphasalazine  
  Cyclosporin  
  Penicillamine  
  Gold  
  Hydroxychloroquine  
  Azathioprine  
  Cyclophosphamide  
  Leflunomide  
  Anakinra  
  Anti-TNF drugs (etanercept, infliximab, adalimumab) |
| Septic arthritis | Antibiotics  
  Gout (treatment to prevent further attacks) | Allopurinol  
  Probenecid  
  Sulphinpyrazone |
Groups of drugs used to treat arthritis

Drugs used to treat arthritis can be divided into five broad groups:

1. **Painkillers (analgesics)**
   These relieve pain. They are used for many different types of arthritis and are often used together with other drugs.

2. **Non-steroidal anti-inflammatory drugs (NSAIDs)**
   These reduce inflammation of the joint as well as pain. They are used for many different types of arthritis, often with other drugs. If one type does not work, your doctor may try another. They are usually given by mouth but may also be given by suppository or in slow-release preparation (also called ‘retard’). ‘Slow-release’ means that the drug is gradually absorbed by the body a little at a time, rather than all at once. NSAID creams or gels may also be used by rubbing onto skin over a painful joint or muscle.

   NSAIDs can damage the lining of the stomach and cause bleeding, particularly if taken in higher doses or over a long period of time. **They should therefore only be used with caution and only continue to be used if they are controlling your symptoms. You should not take them if you have a history of indigestion or stomach ulcers.**

3. **Amitriptyline**
   Although this drug is also used as an anti-depressant it is often used to help sleep and may also effectively reduce some types of arthritic pain, especially neuralgic pain. This is pain from irritation of nerve roots, especially coming from the neck and back.

4. **‘Disease-modifying’ or ‘second-line’ drugs (DMARDs)**
   This group of drugs includes sulphasalazine, penicillamine, gold, hydroxychloroquine and leflunomide. They are used mainly in the treatment of rheumatoid arthritis but also in some other rheumatic diseases. They reduce pain, swelling and stiffness. They do not work at once but may take several weeks to work. If you do not do well on one of these drugs, or if you develop any side-effects, then your doctor may try one of the others.

   Another group of ‘disease-modifying’ drugs are immunosuppressant drugs. They are termed ‘immunosuppressant’ because they suppress the immune system (the body’s own defence system). They include methotrexate, cyclosporin, azathioprine and cyclophosphamide. Because they affect the immune system they may produce side-effects, and so need careful monitoring.

   Immunosuppressant drugs are often used to treat cancer but you can be reassured that your arthritis has nothing to do with this disease.

   A new group of drugs are the anti-TNF drugs – etanercept, infliximab and adalimumab. Anti-TNF drugs and anakinra can reduce inflammation in people with rheumatoid arthritis. These drugs are currently only being used in people who have not responded to other disease-modifying drugs.

   There are separate information sheets published by the Arthritis Research Campaign (arc) on the drugs described here. See the list on the back page for details.

5. **Corticosteroids (steroids)**
   Corticosteroids are very effective in controlling inflammation and may have some disease-modifying effects. However, if used for a long time (many months) or in high doses they produce side-effects. For this reason doctors try to avoid these drugs or use them in as low a dose as possible.

   Osteoporosis (thinning of the bones) can be caused by steroids and for this reason your doctor may prescribe treatment to protect your bones while taking steroids. However, they do have an important
role to play in many different rheumatic diseases. For example, if one particular joint is inflamed, your
doctor may inject it with a steroid preparation. Steroids can also be injected into a vein or a muscle.
The doses given are much higher than with tablets and these drugs can be effective in dampening the
arthritis very quickly.

**Monitoring drug treatment for arthritis**

For some drugs regular checks are needed, so the drugs can be stopped if necessary at an early stage
before a serious side-effect occurs.

For example, several drugs used in the treatment of rheumatoid arthritis (such as sulphasalazine,
gold, penicillamine, methotrexate, azathioprine and anti-TNF drugs) can affect the blood, and people
on these drugs need to have their blood checked regularly. For gold and penicillamine regular urine
checks are needed, and for methotrexate a regular blood sample is needed to check the working of
the liver. (Further details are given in the separate arc drug information sheets listed overleaf). The
different checks must be done either in the surgery or at the hospital.

**Important points to remember about drug treatment of arthritis**

- You may be on more than one drug for your arthritis. This is because different drugs work in
different ways. A common combination is an analgesic, a non-steroidal anti-inflammatory drug
(NSAID) and one or more disease-modifying drugs (DMARDs).
- If one drug does not work this does not mean that you will not respond to another. Similarly if
you develop side-effects with one drug, this does not mean that you will develop the same
problems with another drug.
- Some drugs, including several used in the treatment of rheumatoid arthritis, do not work
immediately. Some can take several months to produce improvement.
- While most drugs are taken by mouth (orally) some are given by suppository or by injection. For
example, gold is usually given by injection into a muscle (intramuscular injection), etanercept is
given by injection under the skin, and infliximab is given as an infusion into a vein.
- Some drugs are started at a low dose which is gradually increased (e.g. methotrexate). Other
drugs are started at a higher dose and depending on how you respond to the drug the dose may
be reduced (e.g. gold injections).

**General points to remember about all drugs**

- Keep a list of all the drugs you take (including those bought over the counter) so that you can tell
your doctor.
- Follow the instructions which your doctor or pharmacist gives you about taking the tablets. For
example, anti-inflammatory tablets should be taken with or after food. Penicillamine is taken
on an empty stomach. If the instructions are not clear, ask for an explanation.
- If after starting a drug for arthritis you experience any side-effects, tell your doctor.
- Do not take medicines which you can buy without prescription without first discussing this
with your doctor. These medicines may not be safe for you. For example, some contain anti-
inflammatory drugs which can cause problems or react with the drugs which your doctor
prescribes. This includes complementary medicines, e.g. herbal remedies, nutritional supple-
ments etc.
- Never share your medicines with others. Your medicines may harm them, even if their symptoms
are the same as yours.
- Keep medicines out of the reach of children.
- Some drugs must not be taken together with alcohol. If in doubt, ask your doctor.
- If you miss a dose, do not try to 'catch up' by taking extra tablets. If you are worried, ask your
doctor or pharmacist.
- Drugs are only one aspect of the treatment of arthritis. Other helpful treatments include
physiotherapy, occupational therapy and foot care (chiropody/podiatry).
And remember...

If you are in any doubt about your drug treatment for your arthritis, ask your doctor, nurse or pharmacist for advice.

Finally...

arc publishes individual patient information sheets about drugs. These may be read together with this more general one on Drugs and Arthritis. Current sheets cover:

- Adalimumab
- Anakinra
- Azathioprine
- Cyclophosphamide
- Cyclosporin
- Etanercept
- Gold by intramuscular injection
- Hydroxychloroquine
- Infliximab
- Leflunomide
- Local steroid injections
- Methotrexate
- Non-steroidal anti-inflammatory drugs (NSAIDs)
- Penicillamine
- Steroid tablets
- Sulphasalazine

Remember to keep all medicines out of reach of children.

PLEASE NOTE: this information sheet does not list all the side-effects these types of drug can cause. For the full details, please see the drug information leaflet which comes with your medicine. Your doctor will assess your medical circumstances and draw your attention to side-effects which may be relevant in your particular case.

Please contact arc for details of information sheets on specific drug types, or see our web site at www.arc.org.uk.

There are two national organisations in the UK working on behalf of people with arthritis: the Arthritis Research Campaign (address on front page) and Arthritis Care (18 Stephenson Way, London NW1 2HD. Phone: 020 7380 6500. www.arthritiscare.org.uk). Both have agreed the content of this information sheet.