

# Steroids and JIA



## Steroids and JIA

Juvenile Idiopathic Arthritis is a condition that results in inflammation of the joints. What causes this is unknown, but from research, we know that there is a problem with the immune system (the way the body protects, defends and recognizes itself). White blood cells and chemicals (called e.g. antibodies, cytokines) that the body makes are part of this immune system. In JIA, the immune system appears to be unbalanced, resulting in inflammation which mainly affects the joints. This inflammation causes pain, swelling and difficulty in moving the body. Over time, this inflammation can damage the joints. Sometimes, this inflammation is not only limited to the joints and can result in other symptoms such as fever, rashes, tiredness, loss of appetite and weight loss.

## What steroids are used in JIA ?

The steroids used in JIA are Prednisone, Prednisolone, Methylprednisolone and long acting steroids e.g. methylprednisolone acetate (Depomedrol) or triamcinolone acetonide (Kenacort), triamcinolone hexacetonide (Aristospan)

## How do steroids work ?

Prednisone helps to reduce the inflammation and hence the pain and swelling associated with arthritis. Steroids are usually used short-term to control inflammation until other medication like methotrexate starts to work.

## How are steroids taken ?

Steroids can be taken by:  
mouth (orally), injection into the vein (intravenously) or injection into the affected joint(s) (intra-articularly).  
Prednisolone is available in syrup and tablet form,

while Prednisone is available in tablets.  
Methylprednisolone is given by injection into the blood for 2 to 3 days. Long acting steroids like Triamcinolone acetonide or hexacetonide are especially made to inject into the affected joints.

## What are the possible side-effects ?

Side-effects depend on how the prednisone is taken, the dose and duration. Possible side-effects are increased appetite, hyperactivity, restlessness and mood changes. With high dosage and long term use, the effects can be weight gain, moon face, thin skin, muscle weakness, high blood pressure, and sometimes cataracts, and high blood sugar. Weaker bones are also a long term side-effect. This is monitored by bone density scans. Patients on long term steroids are advised to maintain an adequate calcium intake and are given vitamin D (Rocaltrol) to help decrease this side-effect.

## What about other medicines ?

Other medicines such as paracetamol, NSAIDs, methotrexate, leflunomide and antibiotics can be taken with prednisone. It is best to first discuss taking any new medication with your family doctor or your specialist.

## What about infections and immunisations ?

Immunisations/Vaccines – generally ‘live vaccines’ such as MMR (mumps, measles and rubella), oral polio or chickenpox vaccines are not recommended while on steroids. Influenza vaccine and the meningococcal B (MenZB) vaccine may be given.

Infections - as prednisone affects the immune system and can affect the body’s ability to fight infections, contact with adults and children who have contagious illnesses like chicken pox should be avoided where possible. You should report any sign of infection e.g. fever to your doctor.

Chicken pox/Measles – if there has been contact with chicken pox, your doctor should be informed immediately. Your doctor may consider giving your child an injection of VZIG (varicella zoster immune globulin) to help stop him/her getting chicken pox, provided this is within 72 hours of exposure. However, if chicken pox develops, methotrexate should be stopped and medication called acyclovir should be given to help fight the chickenpox.

## Any other precautions ?

If steroids have been taken for longer than a week, IT IS DANGEROUS TO SUDDENLY STOP taking the MEDICATION without prior discussion with a doctor. Ideally the dose should be decreased in a gradual and stepwise manner. If the dose is gradually decreasing, or has been stopped in the last SIX months and your child becomes UNWELL for any reason (e.g. fever, vomiting, infection), please seek medical review immediately and inform the doctor about his/her recently having had steroids.

### **A few handy tricks to help your under five year old take their prednisone...**

Sometimes it is helpful to let your child have some control and choice. Try letting them choose if you use a spoon or syringe for example.

Sometimes it is helpful to let your child have some control and choice. Try letting them choose if you use a spoon or syringe for example.

Masking the taste of the crushed pill in something sweet like chocolate syrup is sometimes easier than giving the liquid prednisolone.

Try having them suck on an ice block first to partially numb the mouth

Try storing the prednisolone liquid in the fridge as it may help reduce the bad taste.

Have a glass of their favourite drink ready to go for right after they take it

## What if I/we have more questions ?

Please feel free to discuss these with any member of the Rheumatology Team.