

## Methylprednisolone trial for Berger's disease stopped early

August 3 2017, by Nial Wheate



Credit: Ksenia Chernaya from Pexels

Methylprednisolone is a prescription drug used to treat conditions involving inflammation, like asthma, arthritis, gout, tendinitis, transplant rejection, allergic reactions, and the skin conditions eczema and



psoriasis.

It's in the news because doctors have been trialling the drug to see if it helped treat a rare kidney condition called IgA nephropathy, also known as <u>Berger's disease</u>.

A study <u>published this week</u> reported an international trial of oral methylprednisolone involving 262 patients (including Australians) was stopped early due to safety concerns. Although the drug resulted in an almost three fold lower risk of kidney failure, there was an almost five fold higher risk of serious infection. The researchers reported two patients had died from these trial-related infections.

Other clinical trials have also reported higher rates of adverse effects, like serious infections, from oral use of methylprednisolone when treating IgA nephropathy.

However, for people prescribed the drug for other reasons side effects are rare. And methylprednisolone should not to be confused with similarly sounding medicines in the same drug family, like prednisolone or prednisone.

## Use and formulations

Methylprednisolone is a type of <u>corticosteroid</u>, the same drug family containing hydrocortisone, dexamethasone, prednisone, prednisolone and triamcinolone.

Corticosteroids are not the same as <u>anabolic steroids</u>, which some athletes and body builders use illegally to build muscle and help performance.

Corticosteroids suppress inflammation and the immune system by



regulating how genes are expressed.

In Australia, methylprednisolone is indicated for acute severe asthma, arthritis (including both rheumatoid and osteoarthritis), gout (an arthritislike condition due to the build up of uric acid in the bloodstream), tendinitis, acute transplant rejection, and some autoimmune diseases, like allergies, eczema and psoriasis.



Weekly Dose
Drug type
Corticosteroid
I.D. Name
Methylprednisolone (generic) or Solu-Medrol, Methylpred, Advantan, Depo-Nisolone, Depo-Medrol (brand names)
Classification
Schedule 4, Prescription only
Developed
1950s
So Cost
Between \$23.25 and \$38.80 depending on the patient and the dosage form, or \$6.30 for concession card holders
Side effects
Rare (rate, less than 0.1%), most commonly liver toxicity
Sommon form
Both intravenous and intramuscular injections, and as a 0.1% cream
C theconversation.com



Methylprednisolone is also on the <u>World Health Organisation's list of</u> essential medicines that:

"... satisfy the priority health care needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness."

The most <u>up-to-date list</u> published in March 2017 includes <u>methylprednisolone</u> for the treatment of <u>acute lymphoblastic leukaemia</u>. The list also includes the related drug, <u>prednisolone</u>, to treat different types of leukaemia and lymphoma.

While methylpredisolone is available in other countries in tablet form, in Australia it is only available by prescription as an injection or as skin cream or ointment. As an <u>off-patent</u> medicine, it is available from a variety of companies in different brands.

## Safety and side effects

The <u>Australian Medicines Handbook</u> (subscription required) says side effects should be rare (have a rate less than 0.1%), the most common of which is liver toxicity. It is safe for women to use immediately after breastfeeding, but they should avoid using it within four hours before breastfeeding. This is because very small amounts of the <u>drug</u> can be transferred into the milk.

<u>Other side-effects</u> depend on the dose and the formulation used. When used on the skin, side effects can include: thinning of the skin, appearance of fine blood vessels, acne, infection of hair follicles,



excessive or unwanted hair growth, redness around the mouth, skin discolouration and allergic skin reactions.

## In a nutshell

Methylprednisolone is an effective and safe medicine for treating inflammatory and autoimmune conditions. Recent studies into its use for IgA nephropathy have indicated an unacceptably high risk of serious infection.

Despite this, you should not be at risk if you use the medication as directed and prescribed by your doctor. However, if you have any concerns, you should speak to your local pharmacist.

This article was originally published on <u>The Conversation</u>. Read the <u>original article</u>.

Provided by The Conversation

Citation: Methylprednisolone trial for Berger's disease stopped early (2017, August 3) retrieved 27 April 2024 from https://medicalxpress.com/news/2017-08-methylprednisolone-trial-berger-disease-early.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.