

# PHARMACY

**Drug Information** 

# Methotrexate Injection



## What is Methotrexate?

• Methotrexate is an anticancer drug used to treat many types of cancer including blood cancers such as leukemia and lymphoma; and solid cancers such as breast cancer and sarcoma.

## How is Methotrexate Administered?

- Methotrexate can be given as an injection into your veins (intravenous) or into your spine (intrathecal).
- In some cases, Leucovorin infusion may be given 24 hours after Methotrexate to reduce the side effects of Methotrexate.

# Can Methotrexate Be Administered / Taken With Other Medications?

• Please inform your doctor or pharmacist if you are taking other medications, including Traditional Chinese Medicines, Jamu medicines or supplements.

# What are the Important Side Effects of Methotrexate?

Inform the nurses immediately during infusion of Methotrexate if you experience the following:

<u>Allergic reaction</u>

Methotrexate may rarely cause an allergic reaction while it's being given. Signs of a reaction can include a rash, flushing or shortness of breath, swelling of your face or lips, feeling dizzy, having abdominal, back or chest pain or feeling unwell.

• Pain along the vein

Methotrexate may cause pain along the vein. If you feel pain, tell your nurse straight away so that the infusion site can checked. They may give the drug more slowly or flush it through with more fluids to reduce pain.

• Medications prescribed by your doctor should be beneficial for your condition even though they may result in some inevitable side effects.

Side Effect	Management
Risk of infection can occur as Methotrexate can reduce the number of white blood cells in your blood	<ul> <li>To reduce risk of infection: <ul> <li>Wash your hands after toileting.</li> <li>Avoid crowds and people who are sick.</li> <li>Avoid raw food.</li> </ul> </li> <li>Please proceed to the A&amp;E department immediately if you experience signs of infection such as fever with a temperature of 38°C and above, chills and shivering. Avoid taking Paracetamol (Panadol®) to relieve fever. Be aware that taking Paracetamol may mask fever and hence delay treatment of infection.</li> </ul>
Bruising or bleeding can occur as Methotrexate can reduce the number of platelets in your blood	<ul> <li>To reduce risk of bleeding problems:</li> <li>Do not pick your nose.</li> <li>Brush your teeth gently with a soft toothbrush.</li> <li>Be aware that bleeding may take a longer time to stop.</li> </ul>
	• Please proceed to the A&E department immediately if you experience any severe bleeding (eg, passing a large amount of fresh blood in urine or stools, or passing black sticky stools) or significant bruising.
Nausea or vomiting	• Take small, frequent meals.
	• Avoid smells that precipitate nausea.
	<ul> <li>Take medicines for nausea or vomiting prescribed by your doctor.</li> </ul>
	• Avoid tight-fitting clothes around the waist.

Side Effect	Management
Diarrhoea	<ul> <li>Inform your doctor if this is severe and/or does not improve with medicine use.</li> </ul>
	<ul> <li>Drink at least two litres (8 cups) of fluids every day when you are having diarrhoea.</li> </ul>
	<ul> <li>Avoid milk or dairy products and/or high fibre food whilst you are having diarrhoea.</li> </ul>
Mouth ulcers can occur on the tongue, the sides of the mouth or in the throat and this can lead to an infection	<ul> <li>Brush your teeth gently after eating and at bedtime with a soft toothbrush.</li> </ul>
	<ul> <li>Rinse and brush your dentures after eating and soak them in denture solution overnight.</li> </ul>
	<ul> <li>Rinsing your mouth regularly with an alcohol-free mouth gargle or salt water may help reduce chances of infection.</li> <li>water may help reduce chances of infection.</li> </ul>
Hair loss or thinning	• Wear a wig or hat or use a gentle shampoo.
Fatigue or tiredness	• Do not drive or operate machinery if you are feeling tired. Inform your doctor if fatigue is persistent or worsens.
Skin sensitivity to sun and skin rashes	• Avoid direct sunlight and apply sunscreen with an SPF (sun protection factor) of at least 30 may help. Alternatively, wear a hat, long sleeves, and long pants outside on sunny days.
	• Apply moisturizers to dry areas may help.
Difficulty with speech, weakness of the arms and legs, seizures or confusion	• This may occur with high doses of Methotrexate or if Methotrexate is given intrathecally. Please proceed to the A & E department immediately if you experience such symptoms.

Side Effect	Management
Changes in the way the liver works	• Please proceed to the A & E department immediately if you experience any yellowing of eye white and skin or tea-coloured urine, pale stools or severe abdominal pain.

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

### Are There Any Special Precautions That I Need to Take?

- It is important to inform your doctor if you intend to conceive or breastfeed while taking this medication.
- You must not become pregnant during treatment with Methotrexate and must use an effective method of contraception. You should take appropriate contraceptive measures during and up to 6 months after cessation of treatment. If pregnancy occurs during your treatment, you must inform your doctor immediately.
- Methotrexate may have an anti-fertility effect, which could be irreversible. You should discuss with your doctor regarding fertility preservation prior to starting treatment.
- You should not breast-feed during treatment.

## What Else Can I Do to Help My Condition?

• <u>Exercise</u>

Light exercise is recommended as it helps to improve mobility, balance and even emotional well-being. Avoid strenuous exercise, and rest when you are feeling tired.

• <u>Stay positive</u>

Understand your condition and take an active role in managing it. Do not be afraid to talk about it with your doctor/ pharmacist/ family members. Repressed feelings can be harmful to your immediate well-being and long-term health. <u>Adequate hydration</u> Maintain adequate hydration with 2 to 3 litres (8 to 12 cups) of fluids per day unless informed by your doctor to restrict fluids. This will decrease your chances of getting constipation and also prevent dehydration.

### Medical and dental treatment

If you need to go into hospital for any reason other than cancer, always inform the doctors and nurses that you are having chemotherapy. Talk to your cancer doctor if you think you need dental treatment. Always inform your dentist that you are having chemotherapy.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

You can also find useful information with regards to your medication on this website:

https://www.macmillan.org.uk/information-and-support



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