Improving lives together
Norfolk and Waveney Integrated Care System

Medicines Optimisation

Best Practice Guidance for Care Homes – *Bulletin 9a*

Methotrexate Injection

Methotrexate is a drug which should be treated with great care. It is very important that all care home staff involved in the administration of this medicine or who may come into contact with body fluids of residents who are taking it, have appropriate training and are aware of the associated risks.

Methotrexate is given as a **once weekly dose** and should **never** be administered on a daily basis as this could result in severely reduced immunity or serious infection. Care home staff should ensure appropriate safety measures are in place to prevent this from occurring.

Dosage

- Methotrexate should be taken as a **single dose, once a week, on the same day each week.** If you receive a prescription for a more frequent dose, it is **vital** to query this double check with the GP or pharmacist.
- **Local guidance** recommends that the device the patient has been initially trained on should not be changed without adequate retraining. Confirm with the patient which product is being used to ensure continuity of care.
- Methotrexate is available in pre-filled syringes (Zlatal® and methotrexate in 25mg/ml) and pre-filled pens (Metoject® in 50mg/ml strength and Nordimet® in 25mg/ml strength) – both available in various volumes to support different doses.
- Folic acid will be prescribed to help to reduce the side effects of methotrexate, dosing could be from once a week to six days a week Folic Acid should not be taken on the same day as methotrexate as folic acid can reduce the effectiveness of methotrexate.

If a resident refuses to take their methotrexate or folic acid, the GP must be informed.

Methotrexate is a safe and effective medication if taken at the right dose and with appropriate monitoring. Care homes must have robust procedures in place to minimise the potential for harm to the service user and staff.
Methotrexate should be injected weekly on the same day as it was started.
Alcohol consumption may increase the risk of liver damage, and residents should be made aware that it is recommended they avoid alcohol throughout the whole treatment period.

Administration and Recording

- The pharmacy should clearly label the methotrexate box with appropriate warnings, so staff are aware.
- Residents may administer their own methotrexate if they have been trained to do so and are still able to do so without risk of harm to themselves or others.
- Care staff may be trained to administer methotrexate injections, this is a delegated task and care staff would require sign off by district nurses to undertake this task.
- All methotrexate doses should be double checked by another member of staff trained in medication administration.
- Women of childbearing age who are being asked to administer methotrexate must be informed of the fact that methotrexate exposure may harm an unborn baby. This further highlights the importance of always wearing appropriate personal protective equipment**. It is recommended that staff or carers at any stage of pregnancy or nursing mothers should not handle cytotoxic drugs.**
- On receipt of the Medication Administration Record (MAR) sheet the care home should cross through the days when methotrexate is not to be given and clearly highlight the day it is to be given.
- The patient-held monitoring and dosage record must be kept up to date throughout treatment.

Monitoring

- Residents taking methotrexate will require regular blood tests.
- It is important to note any new or worsening symptoms experienced after starting methotrexate treatment and discuss them with the resident's doctor.
- Carers and residents should be aware of the acute side effects that can occur at any time during treatment. Treatment should be stopped immediately, and medical advice sought urgently from the doctor if serious side effects occur which include:
  - **Severe skin rash that causes blistering:** (this can affect the mouth and tongue)
  - **Persistent cough, pain, difficulty breathing or breathlessness.**
  - **Skin rash and fever with swollen glands**: (particularly in the first 2 months of treatment).
  - **Sore throat, fever, chills, or muscle aches:** methotrexate can make the resident more susceptible to infections. Minimise risk of infections and take sensible precautions to avoid them.
  - **Severe allergic reaction (anaphylactic reaction):** although very rare, the resident may suddenly experience itchy skin rash (hives), swelling of the hands, feet, ankles, face, lips, mouth, or throat (which may cause difficulty in swallowing or breathing), wheeze and feeling faint. If this occurs, seek medical attention immediately.
  - **Whites of the eyes become yellow or severe itching of the skin,** nausea, vomiting, abdominal discomfort and dark urine**:** can be a sign of liver problems.
  - **Severe and continuing diarrhoea or vomiting:** subsequent dehydration can lead to the kidneys inability to flush methotrexate from the blood.
  - **New unexplained bleeding or bruising:** can indicate that blood cells are being affected by the methotrexate.

Safe disposal of methotrexate injections

- Care homes **with** nursing will need to obtain a cytotoxic waste disposal bin (purple sharps bin) from their waste contractor to dispose of methotrexate syringes / pens safely to avoid potential harm to others.
- Care homes (**without** nursing) will need to obtain a cytotoxic waste disposal bin (purple sharps bin) from the GP surgery, once full this should be returned to the GP practice for correct disposal.

References

Methotrexate Shared Care Agreement – NW ICB netFormulary
https://www.norfolkandwaveneyformulary.nhs.uk/about.asp

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