Methotrexate Administration in the Client with Rheumatoid Arthritis or Psoriasis

Overview

Methotrexate is an antimetabolite used in low doses to treat rheumatoid arthritis and psoriasis. Public Health nurses can administer Methotrexate by order of a physician after completion of an appropriate instructional program.

Methotrexate must only be administered by clinicians who have knowledge of the indications, contraindications, drug interactions, adverse reactions, and potential complications associated with its administration. The administering clinicians must also demonstrate the ability to pass the Self Study material as part of their prerequisite before administering Methotrexate.

Methotrexate has the potential for serious toxicity. Toxic effects may be related in frequency and severity to the dose or frequency of administration, but have been seen at all doses. Because they can occur at any time during therapy, it is necessary to follow clients on Methotrexate closely. Most adverse reactions are reversible if detected early. When such reactions do occur notify the physician immediately.

Clinical pharmacology of Methotrexate has not been well studied in older individuals. Due to diminished hepatic and renal function as well as decreased folate stores in this population, this population must be monitored closely for early signs of toxicity.

Clients should be informed of the early signs and symptoms of toxicity, of the need to see the physician promptly if they occur, and the need for close follow-up, including periodic laboratory tests to monitor toxicity.

Both the physician and pharmacist should emphasize to the client that the recommended dose is taken weekly in rheumatoid arthritis and psoriasis, and that mistaken daily use of the recommended dose has led to fatal toxicity. Clients should be encouraged to read the Client/Patient Instructions sheet within the dose pack or medication vial.

Clients should be informed of the potential benefit and risk in the use of Methotrexate. The risk of effects on reproduction should be discussed with both male and female clients taking Methotrexate.

Clinicians must also be aware of the health risks and means for protecting themselves when working with antimetabolite/antineoplastic agents. (See Self Study.)

Assessment:

1. Determine the client’s ability to cooperate with the procedure and provide teaching to client concerning Methotrexate and the administration of Methotrexate.
2. Review the physician’s order.
3. Be familiar with client’s dose schedule and verify before proceeding. Confirm any laboratory specimens needed prior to administration.
Diagnosis:

- Potential for deficient knowledge, related to the purpose of Methotrexate administration and possible side effects.
- Risk for complication/toxicity associated with Methotrexate.
- Potential for anxiety related to the procedure.

Resources:


CDC, Antineoplastic Agents, Occupational Hazards in Hospitals. September 2004. Cincinnati, OH.