Antineoplastic Drug Administration Course: Learning outcomes



Handling antineoplastic drugs & related waste safety

- 1. Comply with legislation, relevant guidelines and local organisation policies for:
 - a. handling, disposal, transport and storage of antineoplastic drugs,
 - **b.** waste management including hazardous drug spill management, handling patients' body waste and waste associated with administration of antineoplastic drugs,
 - c. health surveillance of employees and
 - d. first aid measures for accidental contamination.
- Describe the:
 - a. routes of excretion of antineoplastic drugs,
 - b. sources of waste associated with administration of antineoplastic drugs,
 - c. management of hazardous drug spills and
 - d. management of personnel contamination to antineoplastic drugs or related waste.
- 3. Implement safe workplace practices to minimise the risk of:
 - a. occupational exposure to antineoplastic drugs or related waste for staff / patients / carers and
 - **b.** contamination of the environment with antineoplastic drugs or related waste.

Understanding how antineoplastic drugs work

- 1. Understand the cell cycle including the different stages.
- 2. Describe the:
 - a. effects of antineoplastic drug treatment on the cell cycle,
 - b. different antineoplastic drug classifications and their mechanism of action on the cell
 - c. common side effects, drug specific side effects and toxicities of antineoplastic drugs,
 - d. different routes for administration and implications for clinical practice and
 - e. safety issues and policy requirements associated with administration of intrathecal antineoplastic drugs.
- Identify and access resources for information on antineoplastic drugs including side effects, drug specific side effects and toxicities.

Reviewing protocols and prescriptions

- 1. Identify and access resources for information on antineoplastic drug treatment protocols.
- 2. Review antineoplastic drug treatment protocols and correctly identify specific administration and supportive care requirements.
- 3. Identify the risk of a hypersensitivity reaction and / or risk of extravasation for the prescribed antineoplastic drugs.
- 4. Calculate drug doses using different calculations i.e. Body Surface Area (BSA), Area Under the Curve (AUC), mg / kg (aged based) and dose modifications for toxicity.
- 5. Compare the patient's prescription chart to the prescribed treatment protocol ensuring all doses and timing of antineoplastic drugs and supportive therapy are correct.
- 6. Respond appropriately to indications for changes in treatment and dose modifications according to the antineoplastic drug treatment protocol.
- 7. Describe the role of clinical trials in the management of patients with a cancer diagnosis.
- 8. Report incidents and medication errors according to organisational policies and procedures.

Educating the patient and carer / family members

- 1. Describe the potential and actual ethical issues in the care of patients receiving treatment for a cancer diagnosis including informed consent, assent, advocacy and duty of care.
- Implement the key elements of education into education for patients and carers / family members.
- **3.** Assess the information needs and learning requirements of patients and carers / family members before, during and after the administration of antineoplastic drugs.
- 4. Educate the patient and carer / family member about:
 - a. managing side effects and toxicities of antineoplastic drug treatment and
 - **b.** the difference between side effects and toxicities which require hospitalisation and those which can be managed at home.
- **5.** Use supportive care resources and appropriate sources of patient information when providing education for patients and carers / family members.
- 6. Accurately document provision of education in a patient's medical record.

Assessing patients



- 1. Complete a comprehensive patient assessment including clinical, physical and psychosocial assessments before administration of antineoplastic drugs.
- 2. Assess a patient's venous access requirements according to the prescribed antineoplastic drug treatment protocol.
- 3. Assess a patient's venous access and refer for an appropriate device if required.
- 4. Complete and review all relevant clinical assessments required for specific antineoplastic drugs according to eviQ, or organisation specific treatment protocols or clinical trials information.
- 5. Describe and access information resources on the assessment and immediate management of hypersensitivity reactions.
- **6.** Assess a patient's risk factors which may lead to an extravasation injury.
- 7. Complete all documentation at the conclusion of treatment and ensures the effective discharge for the patient.
- 8. Accurately document all assessment findings in a patient's medical record.

Administering oral antineoplastic drugs

- 1. Comply with legislation, relevant guidelines and local organisation policies for administration of oral antineoplastic drugs.
- 2. Complete an initial and then follow up physical, clinical and psychosocial assessment of the patient receiving oral antineoplastic drugs.
- 3. Implement key elements of education into education for patients and carers / family members about treatment with oral antineoplastic drugs.
- 4. Educate the patient and carer / family member about safety issues related to treatment with oral antineoplastic drugs.
- **5.** Demonstrate the correct:
 - a. handling precautions when administering oral antineoplastic drugs,
 - b. procedure for the administration of oral antineoplastic drugs including use of personal protective equipment and
 - **c.** procedure for disposal of all associated equipment and clinical waste.
- **6.** Accurately document administration of oral antineoplastic drugs in a patient's medical record.

Administering antineoplastic drugs

- 1. Comply with legislation, relevant guidelines and local organisation policies for administration of antineoplastic drugs.
- 2. Describe the core principles, processes and safety issues of administering antineoplastic drugs via different routes including intravenous, intramuscular, intraperitoneal, intravesical, topical, subcutaneous and intrathecal.
- 3. Implement the key elements of education into education for patients and carers / family member's education about treatment with antineoplastic drugs and routes of administration.
- 4. Educate the patient and carer / family member about safety issues related to treatment with antineoplastic drugs.
- 5. Identifies the specific safety issues relating to the administration of intravenous antineoplastic drugs via an infusion and bolus.
- 6. Ensure the appropriate access device is inserted before administration of antineoplastic drugs.
- 7. Demonstrate skill in management of peripheral and central venous access devices including assessment of site and patency of device.
- 8. Demonstrate the correct:
 - **a.** safe handling precautions when administering antineoplastic drugs including intravenous, intramuscular, intraperitoneal, intravesical, topical, subcutaneous and intrathecal,
 - b. preventative measures to minimise extravasation injuries,
 - c. procedure for the administration of antineoplastic drugs via different routes including use of personal protective equipment and
 - d. procedure for disposal of all associated equipment and clinical waste.
- 9. Describe the:
 - e. signs and symptoms of an extravasation injury, and
 - f. immediate and long-term management of a suspected or actual extravasation injury.
- **10.** Access information sources on:
 - g. guidelines for safe handling of antineoplastic drugs and related waste,
 - h. antineoplastic drug information,
 - i. antineoplastic drug treatment protocols and
 - j. extravasation injuries and their management.
- 11. Accurately document in a patient's medical record:
 - k. administration of antineoplastic drugs and
 - I. incidents and medication errors.