## **Practice Exam Questions**



# OCN

**Oncology Certified Nurse** 



### **Total Question: 330 QAs**

Question No: 1

An important component of the decongestion phase of complete decongestive therapy for lymphedema is:

- A. Rapidly increasing exercise
- B. Manual lymph drainage
- C. Compression garments
- D. Powder application to the skin

Answer: B

Explanation: An important component of the decongestion phase of complete decongestive therapy for lymphedema is manual lymph drainage. Complete decongestive therapy phases are as follows:

- Decongestion: Manual lymph drainage, compression therapy (multilayer, two-layer, elastic/Velcro wraps, chipped foam products), exercise (start and progress slowly), and skin care (emollients).
- Maintenance: Manual lymph drainage, compression therapy (garments, wraps), exercise, and skin care.

Question No: 2

If a patient is receiving head and neck radiotherapy, dental care should include:

- A. Daily fluoride treatments
- B. Weekly fluoride treatments
- C. Monthly fluoride treatments
- D. Quarterly fluoride treatments

Answer: A

Explanation: If a patient is receiving head and neck radiotherapy, dental care should include daily fluoride treatments. Because of changes in saliva caused by the radiotherapy, the teeth are at an increased risk of decay and periodontal disease. Thorough daily dental care is essential and should include using custom fluoride trays for treatment of the teeth for 5-10 minutes one or two times each day. The patient should be instructed to avoid eating or drinking for 30 minutes after the fluoride treatment.

Question No: 3

Dysesthesia refers to:

- A. Increased response to pain
- B. Minimal to no response to pain
- C. Pain response to a stimulus that doesn't usually cause pain
- D. Abnormal sensations, such as burning or tingling and shooting pains

Answer: D

Explanation: Dysesthesia refers to abnormal sensations such as burning, tingling, and shooting pains. Dysesthesia is caused by nerve damage and is common in peripheral neuropathy. Other terms to describe pain include:

- Hyperalgesia: Increased response to painful stimulus.
- Allodynia: Pain response to stimulus that doesn't usually cause pain.
- Analgesia: No pain response to painful stimulus.
- Hypoalgesia: Diminished pain response to painful stimulus.
- · Hyperpathia: Pain syndrome with increased pain response to stimulus. May occur with other types of pain

response.

Question No: 4

Which of the following classes of drugs bind to pituitary receptors to suppress ovarian production of estrogen?

A. Gonadotropin-releasing-hormone agonists

B. Selective estrogen receptor modulators

C. Aromatase inhibitors

D. Progestins

Answer: A

Explanation: Gonadotropin-releasing-hormone agonists bind to pituitary receptors to suppress ovarian production of estrogen, allowing chemical ovarian ablation (rather than surgical) and suppressing ovulation. Initially, estrogen production increases, but then the estrogen and progesterone levels fall within 2-4 weeks. Naturally occurring gonadotropin-releasing-hormone controls the release of luteinizing hormone and follicle-stimulating hormone by the pituitary gland, which in t urn stimulate the ovaries to produce estrogen. In males, the same process results in decreased levels of testosterone and testicular ablation.

Question No: 5

Two weeks after a hematopoietic stem cell transplant (HPSCT), a patient develops hyperbilirubinemia, right upper quadrant pain, ascites, jaundice, thrombocytopenia, and hepatosplenomegaly. These are indications of:

A. Graft-versus-host disease (GVHD)

B. Hypersensitivity reaction

C. Hepatic veno-occlusive disorder

D. Infection Answer: C

Explanation: Hyperbilirubinemia, right upper quadrant pain, ascites, jaundice, thrombocytopenia, and hepatosplenomegaly developed two weeks after HPSCT are indications of hepatic veno-occlusive disorder (aka sinusoidal obstructive syndrome of the liver), which occurs in up to 30% of patients after HPSCT. Endothelial injury results in coagulation and thrombosis in the sinusoids and the venules, impairing circulation to the hepatic tissue. Symptoms typically begin within the first 2 weeks and can lead to liver failure.

Question No: 6

Patients who were severely undernourished for a prolonged period before the initiation of total parenteral nutrition (TPN) are especially at risk for:

A. Azotemia

B. Refeeding syndrome

C. Hyperammonemia

D. Hyperlipidemia

Answer: B

Explanation: Patients who were severely undernourished for a prolonged period before the initiation of TPN are especially at risk for refeeding syndrome, which is a life-threatening complication caused by sudden changes in the levels of electrolytes. Hypophosphatemia is a common finding as well as hypokalemia, hyponatremia, hypomagnesemia, and hyperglycemia. The patient may exhibit tachycardia, arrhythmias, and hypotension.

Question No: 7

First-line treatment for acute graft-versus-host disease (GVHD) includes cyclosporin or tacrolimus and:

A. Daclizumab

B. Etanercept

C. Infliximab

D. Corticosteroids

Answer: D

Explanation: The first-line treatment for acute GVHD includes continuing cyclosporin or tacrolimus and corticosteroids. Methylprednisolone is usually given intravenously, but topical corticosteroids may also be used for the dermal manifestations (rash, erythroderma). If gastrointestinal affects occur, then enteral administration of nonabsorbable corticosteroids (budesonide) may be added. Other drugs such as daclizumab, etanercept, or infliximab may be necessary if the acute GVHD is steroid refractory.

Question No: 8

Most renal cancers arise from the:

A. Renal parenchyma

B. Renal pelvis

C. Ureters

D. Renal vessels

Answer: A

Explanation: Most renal cancers (90%) arise from the renal parenchyma (renal cell carcinomas). Patients are often asymptomatic in the early stages. Symptoms may include the classic triad of hematuria, flank pain, and a mass in the flank area, but some may develop fever, weight loss, loss of appetite, anemia, varicocele, and/or adenopathy. The primary treatment is partial or complete nephrectomy. Renal cell carcinoma is resistant to chemotherapy and radiotherapy, but immunotherapy and targeted therapies may be indicated for relapsed or unresectable tumors.

#### Question No: 9

A patient developed delayed chemotherapy-induced nausea and vomiting more than 24 hours after treatment. The best approach to control them is to:

A. Administer an initial antiemetic at the completion of chemotherapy and continue for 24 hours.

- B. Administer an antiemetic before chemotherapy and continue for 2-4 days.
- C. Administer an antiemetic as needed at the patient's request.
- D. Administer an antiemetic at the completion of chemotherapy and continue for 2-4 days.

Answer: B

Explanation: If a patient developed delayed chemotherapy-induced nausea and vomiting more than 24 hours after treatment, the best approach is to administer the antiemetic before chemotherapy and to continue on a round-the-clock basis for 2-4 days. Round-the-clock administration is recommended to avoid breakthrough nausea and vomiting, which is much more difficult to control. Treatment options include ondansetron, aprepitant, corticosteroids, metoclopramide, and olanzapine.

Question No: 10

Which type of breast cancer has the lowest survival rate?

A. ER+, PR+, HER2+

B. ER+, PR+, HER2-

C. ER-, PR-, HER2-

D. ER-, PR-, HER2+

Answer: C

Explanation: The "triple-negative" breast cancer type (ER-, PR-, HER2-) has the lowest survival rate. The cancer cells lack estrogen receptors (ER), progesterone receptors (PR), and human epidermal growth factor receptor 2 (HER2). This means that the cancer cells are not sensitive to these hormones and, therefore, will not respond to targeted therapy such as trastuzumab (Herceptin) or tamoxifen (Soltamox). Thus, treatment must focus on standard chemotherapy, which is less effective.

Question No: 11

If a patient is receiving TPN, the filters and intravenous (IV) line tubing should be changed every:

A. 8 hours

B. 12 hours

C. 18 hours

D. 24 hours

Answer: D

Explanation: If a patient is receiving TPN, the filters and tubing should be changed every 24 hours to reduce the risk of infection. Aseptic technique should be used for all feedings and changes of equipment. TPN is an intravenous hypertonic solution containing glucose, fat emulsion, protein, minerals, and vitamins.

Filters may be micropore (solutions without fat emulsion) or 1.2 micron (solutions with fat emulsions). Long peripherally inserted central catheters may be used for short-term TPN. but central venous catheters are usually inserted for long-term TPN.

Question No: 12

If a patient has no insurance and can't afford the cost of treatment for cancer, the most appropriate referral is to:

A. Social media fundraising

B. The organization's social worker

C. Faith-based organizations

D. Patient-assistance programs

Answer: B

Explanation: If a patient has no insurance and can't afford the cost of treatment for cancer, the most appropriate referral is to the organization's social worker. The social worker can help the patient determine what services, such as Medicaid and patient-assistance programs. that the patient may be eligible for. Some patients or family members have turned to social media fundraising (e.g., GoFundMe), which is sometimes successful. Some faith-based organizations may provide limited assistance.

Question No: 13

The most common type of adult leukemia in the United States is:

A. Chronic lymphocytic leukemia (CLL)

- B. Acute lymphocytic leukemia (ALL)
- C. Chronic myelogenous leukemia (CML)
- D. Acute myelogenous leukemia (AML)

Answer: A

Explanation: The most common adult leukemia in the United States is chronic lymphocytic leukemia (CLL) (aka chronic lymphoblastic or chronic lymphoid leukemia). Most patients are older than 55 years old. CLL generally develops from a B-lymphocyte malignant clone. Most cells look mature but are inactive.

Apoptosis is abnormal, so the cells accumulate rather than die. Patients are often asymptomatic initially and then develop "B" symptoms: fever, weight loss, and diaphoresis with night sweats. CLL is often accompanied by autoimmune complications, such as hemolytic anemia or idiopathic thrombocytopenic purpura.

Question No: 14

For which complementary therapy is the evidence of benefit the weakest?

A. Acupuncture

B. Therapeutic massage

C. Homeopathy

D. Mindfulness meditation

Answer: C

Explanation: The complementary therapy for which evidence of benefit is the weakest in homeopathy. Most studies have shown little to no benefit, although, because the volume of substances ingested is so small, there is little risk to the patient. Studies have supported the benefits of acupuncture (for pain, nausea, and vomiting), therapeutic massage (for pain and anxiety), and mindfulness meditation (for anxiety and pain). Patients often turn to complementary therapies as adjuncts to chemotherapy and radiation, and they may find benefits that are not supported by evidence-based research.

Question No: 15

A patient develops a rash 2 weeks after beginning targeted therapy with an epidermal growth factor receptor (EGFR) inhibitor. Which of the following may help relieve the condition?

A. Alcohol

B. Benzoyl peroxide

C. Antiseptic soap

D. An emollient such as Cetaphil

Answer: D

Explanation: If a patient develops a rash 2 weeks after beginning targeted therapy with an EGFR inhibitor, an emollient such as Cetaphil may help to relieve the skin condition. About 66% of patients receiving the EGFR inhibitor develop a papulopustular rash and dry skin, usually on the upper body (face, neck, torso, and/or shoulders). Alcohol and benzoyl peroxide may aggravate the rash. Treatments may include mild soaps/cleansers, sunscreen, emollients, and diphenhydramine or hydroxyzine for itching.

Question No: 16

A cancer survivorship plan should be provided to:

A. Patients with metastasis

B. All cancer patients

C. Patients who request a plan

D. Patients with likely long-term effects

Answer: B

Explanation: A cancer survivorship plan should be provided to all cancer patients. The plan should be in written

form, and the healthcare provider should review the plan with the patient. A plan should include information about the patient's treatment and follow-up care (frequency of physician visits, ongoing treatment, necessary screening) as well as community resources. The plan should list the potential short- and long-term effects of treatment and directions for attending to them and any necessary referrals, such as to physical therapy or to other physicians.

Question No: 17

The imbalances that are characteristic of tumor lysis syndrome include:

A. Hypokalemia, hypophosphatemia, hypercalcemia, and hyperuricemia

B. Hyperkalemia, hyponatremia, hypermagnesemia, and hyperuricemia

C. Hyperkalemia, hypophosphatemia, hypercalcemia, and hyperuricemia

D. Hyperkalemia, hyperphosphatemia, hypocalcemia, and hyperuricemia

Answer: D

Explanation: The imbalances that are characteristic of tumor lysis syndrome include:

- Hyperkalemia: Occurs first as a result of tumor cell lysis.
- Hyperphosphatemia: Follows hyperkalemia.
- Hypocalcemia: Results from hyperphosphatemia.
- Hyperuricemia: Results from the release of nucleic acid purines.

Acute kidney injury occurs as the kidneys try to clear potassium, phosphates, and uric acid. Calcium phosphate crystals and uric acid crystals may cause obstruction in the renal tubules.

Question No: 18

A patient who indicated "Jehovah's Witness" on the admission documentation is severely anemic and the patient's physician has ordered a blood transfusion (packed red blood cells). The oncology certified nurse (OCN) should:

- A. Advise the patient of the physician's orders and wait for the patient's response.
- B. Ask the patient if he or she is willing to have a transfusion.
- C. Notify the physician that the patient will refuse transfusions.
- D. Remind the patient of the right to refuse treatment.

Answer: A

Explanation: If a patient who indicated "Jehovah's Witness" on the admission documentation is severely anemic and the patient's physician has ordered a blood transfusion (packed red blood cells), the OCN should advise the patient of the physician's orders and wait for the patient's response. A nurse should never make assumptions about a patient's willingness to have treatment based on their religion, ethnicity, or cultural background. Although many Jehovah's Witnesses refuse blood products, some do not.

Question No: 19

After a left radical mastectomy, a patient develops lymphedema in the left arm with a 4 cm increase in the diameter of the limb and pitting edema. What stage of lymphedema is present?

A. Stage 0

B. Stage I

C. Stage II

D. Stage III

Answer: C

Explanation: If a patient with a left radical mastectomy develops lymphedema in the left arm with a 4 cm increase in the diameter of the limb, this represents stage II lymphedema. The stages of lymphedema are as follows:

- Stage 0: Subclinical, the diameter is unchanged but there is a feeling of heaviness.
- Stage I: A 2-3 cm increase in diameter, relieved by elevation. There is some soreness or throbbing.
- Stage II: A 3-5 cm increase in diameter, and the skin is stretched and shiny. Pitting edema may be evident. Elevation provides little or no relief.
- Stage III: A >5 cm increase in diameter, skin stretched and discolored (brown, purple), fibrotic, peaud'orange appearance. The tissue is firm and non pitting.

Question No: 20

If a patient develops acral erythema (hand-foot syndrome) after treatment with doxorubicin, initial interventions include:

A. Opioid analgesia

B. Celecoxib

C. Topical high-potency corticosteroids

D. Oral prednisone

Answer: C

Explanation: If a patient develops acral erythema (hand-foot syndrome) after treatment with doxorubicin, initial interventions include topical high-potency corticosteroids. Patients often experience tingling, numbness, or sensitivity in the palms and soles of the feet before the emergence of symmetrical erythema and areas of swelling. The skin may be dry and peeling. Some patients develop blisters, bullae, fissures, callus formation, and/or hyperkeratosis. Celecoxib is indicated for capecitabine induced acral erythema.

Question No: 21

Which of the following is a late (>100 days) complication of autologous or allogenic stem cell transplantation?

A. Immunodeficiency

B. Nutritional deficiency

C. Idiopathic pneumonitis

D. Acute graft-versus-host disease

Answer: A

Explanation: Immunodeficiency is a late (>100 days) complication of autologous or allogenic stem cell transplantation. Other late complications include those related to regimen toxicity (cataracts, gonadal dysfunction, neuropathies, and endocrine dysfunction), infections, Epstein-Barr virus post transplantation lymphoproliferative disorder, chronic graft-versus-host disease, malignancy relapse, osteoporosis, and avascular necrosis. Early complications (<100 days) include nutritional deficiency, idiopathic pneumonitis, acute GVHD, graft failure, relapse, infections, and regimen-related toxicities such as hemorrhagic cystitis and organ-system complications.

Question No: 22

In a cancer rehabilitation program, the therapist who usually helps patients with pain management is the:

A. Physical therapist

B. Physiatrist

C. Occupational therapist

#### D. Neuropsychologist

Answer: B

Explanation: In a cancer rehabilitation program, the therapist who usually helps patients with pain management is the physiatrist. The physiatrist specializes in diagnosing and managing pain in order to improve a patient's functional abilities. Physiatrists are medical doctors that are board certified in physical medicine and rehabilitation, so physical therapy is an important part of their focus in patient management.

Question No: 23

The primary risk factor for development of acute GVHD is:

A. The high dose of preparation chemotherapy

B. The gender difference between the donor and recipient

C. An older recipient

D. The degree of human leukocyte antigen difference between the donor and recipient

Answer: D

Explanation: The primary risk factor for the development of acute GVHD is the degree of human leukocyte antigen difference between the donor and the recipient. The greater the difference, the greater the risk. With GVHD, the donor's T cells attack the recipient's healthy cells. Preventive measures include removing donor T cells or giving prophylaxis to suppress T cells. A number of different medications may be used in preparation for stem cell transplantation, including cyclosporine, tacrolimus, methotrexate, sirolimus, and mycophenolate mofetil.

Question No: 24

Which of the following is the most appropriate documentation of a patient's response to treatment?

A. "The patient was severely nauseated and anorexic after treatment."

- B. "The patient has been nauseated, vomited 3-4 times daily, and was able to ingest only small amounts of ginger ale for 2 days after treatment."
- C. "The patient reports nausea, vomiting, and lack of appetite after treatment."
- D. "The patient experienced typica I gastrointestinal upset in response to treatment."

Answer: B

Explanation: An appropriate documentation of a patient's response to treatment is "The patient has been nauseated, vomited 3-4 times daily, and was able to ingest only small amounts of ginger ale for 2 days after treatment." Documentation should be objective, and symptoms should be quantified as much as possible. The type of response and the duration of the response should be noted because this can aid in determining preventive or treatment measures.

Question No: 25

With HPSCT, which drug is indicated as a prophylaxis to prevent reactivation of herpes simplex virus (HSV) for an HSV-seropositive patient?

A. Acyclovir

B. Foscarnet

C. Cidofovir

D. Ribavirin

Answer: A

Explanation: With HPSCT, acyclovir is the drug that is indicated as a prophylaxis to prevent reactivation of HSV

for an HSV-seropositive patient. The drug should be initiated during conditioning and continue until the patient's immune status is fully functioning. If HSV reactivation does occur, acyclovir in higher doses is also the drug of choice. Foscarnet may be substituted if the patient does not respond to acyclovir; cidofovir may be substituted if the patient doesn't respond to foscarnet.

Question No: 26

Patients with the breast cancer genes 1 and/or 2 (the BRCA1 and/or BRCA2 genes) have a lifetime risk of developing breast cancer of about:

A. 40%

B. 50%

C. 60%

D. 70%

Answer: D

Explanation: Patients with the BRCA1 and/or BRCA2 genes have a lifetime risk of developing breast cancer of about 70% by age 70. These patients must be monitored carefully because they also have an increased risk of ovarian cancer, up to 46% for BRCA1 and up to 28% for BRCA2. Prophylactic surgery, including bilateral mastectomy, is often recommended. Elective salpingo-oophorectomy may be done after childbearing age.

Question No: 27

Annual screening for lung cancer with a low-dose CT scan is recommended for smokers with a 20- pack-year smoking history and are current smokers or have quit within the previous 15 years, beginning at age:

A. 40

B. 45

C. 50

D. 55

Answer: C

Explanation: Annual screening for lung cancer with a low-dose CT scan is recommended for smokers with a 20-pack-year smoking history and who currently smoke or have quit within the previous 15 years, beginning at age 50 until age 80. Screening for lung cancer is not recommended for all adults because false positives may lead to overdiagnosis and unnecessary treatment and radiation increases the risk of cancer in patients who are otherwise in good health.

Question No: 28

Under provisions of the Americans with Disabilities Act, an employer has the right to ask a cancer survivor if:

A. The person has advanced cancer.

- B. The treatment cured the person's cancer.
- C. The person can do essential job duties.
- D. The person will need to take time off because of the cancer.

Answer: C

Explanation: Under provisions of the Americans with Disabilities Act. an employer has the right to ask a cancer survivor if the person can do essential job duties but cannot ask for information about the cancer, treatment, or prognosis. The cancer survivor has the right to ask for reasonable accommodations, such as sitting at work instead of standing, but cannot demand to be relieved of essential job duties.

Not all incidences of cancer are considered covered disabilities, but long-term or permanent limitations are

covered.

Question No: 29

If a patient's breast cancer is ER+, PR+, and HER2-, which of the following targeted therapies is indicated?

A. Estrogen

B. Trastuzumab

C. Tamoxifen

D. Lapatinib

Answer: C

Explanation: If a patient's breast cancer is ER+, PR+, and HER2-, the targeted therapy that is indicated is tamoxifen, which inhibits the effects of estrogen. Tamoxifen was the first FDA-approved selective estrogen receptor modifier used to treat breast cancer. Tamoxifen reduces the risk of recurrence of breast cancer by up to 50%. Tamoxifen may also be administered as a prophylaxis for those at a high risk of breast cancer. Tamoxifen may be taken in liquid form (Soltamox) or pill form (Nolvadex). Tamoxifen uses the enzyme CYP2D6 for activation.

Question No: 30

Anticipatory chemotherapy-induced nausea and vomiting typically begin:

A. After the patient experiences chemotherapy-induced nausea and vomiting

B. Before the first chemotherapy

C. After the first 4 months of chemotherapy

D. 2-3 days before chemotherapy

Answer: A

Explanation: Anticipatory chemotherapy-induced nausea and vomiting typically begin after the patient experiences chemotherapy-induced nausea and vomiting. As a conditioned response, the patient may then associate the memory of chemotherapy or smells, sounds, or sights that t rigger memories with nausea and vomiting. Prevention of the initial nausea and vomiting is the most effective treatment. Symptoms typically begin a few hours before chemotherapy and may persist for a day or two after. The appropriate antiemetic depends on the chemotherapeutic agents administered.

Question No: 31

If a patient has smoked 2 packs (40 cigarettes) daily for 15 years, how many pack-years does this represent?

A. 15

B. 30

C. 40

D. 45

Answer: B

Explanation: If a patient has smoked 2 packs (40 cigarettes) daily for 15 years, this represents 30 pack-years. Packyears are defined as follows:

- 20 cigarettes daily x 1 year = 1 pack-year.
- 40 cigarettes daily x 1 year = 2 pack-years.
- 2 pack-years x 15 years = 30 pack-years.
- 1 pipe per day = 2.5 cigarettes.
- 4 pipes per day = 10 cigarettes x 1 year= 0.5 pack-year.

• 1 Havana cigar per day = 4 cigarettes.

Question No: 32

A patient receiving chemotherapy is very critical of other patients and the nursing staff and complains about the quality of care being received. The stage of grief that the patient is likely experiencing is:

A. Bargaining

B. Denial

C. Depression

D. Anger Answer: D

Explanation: If a patient receiving chemotherapy is very critical of other patients and the nursing staff and complains about the quality of care being received, the stage of grief that the patient is experiencing is likely anger. The stages of grief are as follows:

• Stage 1: Denial

• Stage 2: Anger

• Stage 3: Bargaining

• Stage 4: Depression

• Stage 5: Acceptance

Patients may not go through all stages and may not do so sequentially, but some patients become "stuck" and remain at one stage (often denial, anger, or depression) for prolonged periods of time.

Question No: 33

A patient with a brain tumor develops visual hallucinations, visual disturbances, and the inability to read. The most likely site of the lesion is the:

A. Frontal lobe

B. Temporal lobe

C. Occipital lobe

D. Parietal lobe

Answer: C

Explanation: If a patient with a brain tumor develops visual hallucinations, visual disturbances (partial blindness, blurred vision, visual field deficits), and the inability to read, the most likely site of the lesion is the occipital lobe, which processes information involving the eyes. Patients may also develop face blindness (prosopagnosia) and may experience seizures. Headache is a common symptom of all types of brain tumors.

Question No: 34

The most common type of invasive breast cancer is:

A. Infiltrating lobular carcinoma

B. Infiltrating ductal carcinoma

C. Inflammatory carcinoma

D. Medullary carcinoma

Answer: B

Explanation: The most common type of invasive breast cancer is infiltrating ductal carcinoma, which accounts for up to 80% of invasive cancers. Triple-negative breast cancers are almost always of this type, making them difficult to treat. Infiltrating ductal carcinoma begins in a milk duct and then infiltrates the surrounding fibrous

or fatty tissue and is often found on the outer quadrants of the breast. This tumor usually metastasizes first to the lymph nodes in the axil la. The prognosis is usually good with 90% of patients surviving at 5 years.

Question No: 35

With which chemotherapeutic agent should a patient be monitored for signs of peripheral edema, abdominal ascites, and/or pleural effusion?

- A. Docetaxel
- B. Cisplatin
- C. Vinblastine
- D. Paclitaxel

Answer: A

Explanation: Patients receiving docetaxel should be monitored for signs of peripheral edema, abdominal ascites, and/or pleural effusion. Patients should receive an oral corticosteroid (dexamethasone) for 3 days, starting one day before the initiation of docetaxel to reduce the risk of fluid retention (which is usually dose related) and hypersensitivity reaction. Docetaxel is often administered with cisplatin and 5-FU. CYP3A4 inhibitors (such as ketoconazole) may increase the docetaxel level and the risk of toxicity.

Question No: 36

A patient is receiving cisplatin. Which supplement is recommended to prevent an electrolyte imbalance?

- A. Potassium
- B. Calcium
- C. Magnesium
- D. Sodium

Answer: C

Explanation: If a patient is receiving cisplatin, the supplement that is recommended to prevent an electrolyte imbalance is daily magnesium because cisplatin can cause hypomagnesemia. The normal value is 1.6- 2.6 mEq/L. Hypomagnesemia is <1.6 mEq/L with the critical value <1.2 mg/dl. Symptoms of hypomagnesemia include:

- Neuromuscular excitability/tetany
- Confusion, headaches and dizziness, seizures, and coma
- Tachycardia with ventricular arrhythmias
- Respiratory depression

Question No: 37

A patient has cancer of the head of the pancreas. The triad of symptoms that is common with this type of cancer includes:

- A. Weight loss, anorexia, and nausea
- B. Weight loss, anxiety, and nausea
- C. Increasing jaundice, fluid retention, and pain
- D. Increasing jaundice, marked weight loss, and pain

Answer: D

Explanation: If a patient has cancer of the head of the pancreas, the t riad of symptoms that is common with this type of cancer include increasing jaundice, marked weight loss, and pain. The tumor leads to obstruction of the bile duct and resultant jaundice, usually the first sign of the disease. Early satiety, lack of appetite, and

nausea can lead to weight loss. Pain increases as the cancer progresses and may be quite severe.

Question No: 38

If using the four-step approach to treatment of constipation, step 1 includes:

A. Sorbitol or lactulose

B. Milk of Magnesia and bulk laxatives

C. Magnesium citrate or GoLYTELY

D. Docusate sodium or senna

Answer: B

Explanation: If using the four-step approach for treatment of constipation, step 1 includes Milk of Magnesia and bulk laxatives. The intervention at each step should be tried for at least 48 hours before advancing to the next step. Once the constipation is resolved, the patient may return to a lower step. The four steps are as follows:

- Step 1: Milk of Magnesia and bulk laxatives
- Step 2: Docusate sodium or senna
- Step 3: Sorbitol or lactulose
- Step 4: Magnesium citrate or GoLYTELY

Question No: 39

A patient is receiving zoledronic acid 4 mg per 100 ml IV for treatment of cancer-associated hypercalcemia. The IV should be administered over a duration of at least:

A. 5 minutes

B. 10 minutes

C. 15 minutes

D. 30 minutes

Answer: C

Explanation: If a patient is receiving zoledronic acid 4 mg/100 ml IV for the treatment of cancer-associated hypercalcemia, the IV should be administered over a duration of at least 15 minutes after the patient is adequately hydrated. Retreatment may be done after 7 days if the hypercalcemia does not resolve.

The serum creatinine should be checked before administration. Dosage adjustment may be necessary with a serum creatinine level >4.5 mg/dl.

Question No: 40

If a patient with stage IV cancer states "I'm not going to keep living with this," an appropriate response is:

A. "Do you have a plan to end your life?"

- B. "Perhaps your medication can be increased."
- C. "Why do you say that?"
- D. "You should talk to your doctor about your feelings."

Answer: A

Explanation: If a patient with stage IV cancer states "I'm not going to keep living with this," an appropriate response is to ask a direct question: "Do you have a plan to end your life?" Depression is very common among patients with cancer, especially if the cancer is advanced and life-threatening. An effective question to determine if a patient is depressed is, "Do you feel depressed almost all of the time?" because studies show that patients usually answer this question honestly.

Question No: 41

Which chemotherapeutic agent is associated with pulmonary toxicity?

A. Etoposide

B. Carboplatin

C. Cisplatin

D. Bleomycin

Answer: D

Explanation: Bleomycin is a chemotherapeutic agent that is associated with pulmonary toxicity, which can result in pneumonitis and pulmonary fibrosis. Fatal pulmonary fibrosis is a risk factor for cumulative doses >400 units. Other drugs that cause pulmonary toxicity include cytarabine and mitomycin C. Before administration of drugs with known pulmonary toxicity, pulmonary function tests should be carried out and repeated at regular intervals while the patient is receiving therapy.

Question No: 42

The type of non-small cell lung cancer that is most common in smokers and nonsmokers is:

A. Squamous cell carcinoma

B. Adenocarcinoma

C. Large cell (undifferentiated) carcinoma

D. Large cell neuroendocrine carcinoma

Answer: B

Explanation: The type of non-small cell lung cancer that is most common in smokers and nonsmokers is adenocarcinoma. Up to 85% of lung cancers are non-small cell lung cancers. Adenocarcinoma begins in glandular cells that secrete mucous. This type of tumor often remains localized and is therefore easier to treat than some other types of lung cancer. Risk factors for the development of adenocarcinoma of the lung include smoking, secondary exposure to smoke, and exposure to radon gas, asbestos, and cancer-causing agents (arsenic, coal products, gasoline, diesel exhaust, and vinyl chloride).

Question No: 43

Which type of cancer puts a patient especially at risk for tumor lysis syndrome?

A. Acute leukemias

B. Breast cancer

C. Glioblastoma

D. Prostate cancer

Answer: A

Explanation: The type of cancer that puts a patient especially at risk for tumor lysis syndrome is acute leukemias as well as no n-Hodgkin's lymphomas (high grade). Tumor lysis syndrome occurs when large numbers of malignant cells are killed, releasing chemical by-products (intracellular contents) into the circulation, resulting in significant electrolyte abnormalities. Tumor lysis syndrome usually presents at 48-72 hours after the initiation of treatment.

Question No: 44

Strategies to combat cancer-associated fatigue include:

A. Napping and resting as much as possible