Cancer Concepts (CC) Medical and Surgical Oncology Practice Test (Sample)

Study Guide

BY EXAMZIFY

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Questions

1. Which of the following is a potential side effect of immunotherapy used in melanoma treatment?

A. Hair loss

B. Skin rash

C. Nausea and vomiting

D. Increased energy levels

2. After a radical hysterectomy, which anatomical structures would be present?

A. Uterus and cervix

B. Uterus, cervix, vaginal cuff, and perimetrium

C. Only the uterus

D. Partial liver resection

3. What is the purpose of follow-up appointments post-cancer treatment?

A. To monitor for recurrence and manage any long-term side effects

B. To celebrate the end of treatment

C. To evaluate the effectiveness of the initial diagnosis

D. To introduce new treatment options

4. During a modified radical mastectomy, which components are typically removed?

A. Breast tissue and chest wall muscle

B. Only lymph nodes

C. Only nipple and skin

D. Rectal tissue and surrounding organs

5. What is the primary treatment modality for malignant melanoma?

A. Chemotherapy with dacarbazine

B. Immunotherapy with pembrolizumab

C. Surgical excision with appropriate margins

D. Targeted therapy with trametinib

6. What does the "M" in the TNM system represent?

- **A. Malignant potential**
- **B. Metastasis to nearby organs**
- **C. Distant metastasis**
- **D. Minimal tumor burden**

7. What does the term 'malignant neoplasm' typically refer to?

- **A. Benign tumors that do not spread**
- **B. Cancerous tumors that invade surrounding tissues**
- **C. Localized non-cancerous growths**
- **D. All types of lumps in the body**

8. What cancer type accounts for the most deaths annually?

- **A. Breast cancer**
- **B. Colorectal cancer**
- **C. Lung and bronchus cancer**
- **D. Pancreatic cancer**

9. What does TURBT stand for in surgical oncology?

- **A. Transurethral reduction of bladder tissue**
- **B. Transurethral removal of bladder tumor**
- **C. Transregional ultrasound bladder technique**
- **D. Transurethral radius boundary treatment**

10. What is typically expected on the grossing table following a salpingectomy?

- **A. Two uterine tubes**
- **B. One uterine tube unless designated by bilateral**
- **C. Fragments of the uterus**
- **D. Complete reproductive system**

Answers

1. B
2. B
3. A
4. A
5. C
6. C
7. B
8. C
9. B
10. B

Explanations

1. Which of the following is a potential side effect of immunotherapy used in melanoma treatment?

A. Hair loss

B. Skin rash

C. Nausea and vomiting

D. Increased energy levels

Immunotherapy plays a significant role in the treatment of melanoma by harnessing the body's immune system to target and destroy cancer cells. One of the notable side effects associated with immunotherapy is the development of skin rashes. This occurs because immunotherapeutic agents, such as checkpoint inhibitors, can trigger an immune response that may lead to inflammation of the skin or increase sensitivity to the sun, resulting in rashes. Skin rash is a common dermatological side effect observed in patients undergoing various forms of immunotherapy, indicating that the immune system is actively responding. While other side effects such as hair loss, nausea, and vomiting can occur with certain cancer treatments, they are less characteristic of immunotherapy. Specifically, hair loss is more commonly associated with traditional chemotherapy, and gastrointestinal symptoms like nausea and vomiting are primarily linked to chemotherapy as well. Furthermore, increased energy levels are generally not a recognized side effect of immunotherapy; rather, patients may experience fatigue or a range of other effects depending on their individual response to treatment. Understanding these side effects is crucial for patient management, as timely recognition and intervention can help improve patient outcomes and quality of life during treatment.

2. After a radical hysterectomy, which anatomical structures would be present?

A. Uterus and cervix

B. Uterus, cervix, vaginal cuff, and perimetrium

C. Only the uterus

D. Partial liver resection

Following a radical hysterectomy, the surgical procedure involves the complete removal of the uterus, cervix, surrounding tissues, upper part of the vagina, and sometimes nearby lymph nodes. The anatomical structures that would be present after this surgery include the vaginal cuff, which is the surgical closure of the upper vagina where the cervix was attached, and the perimetrium, which is the outermost layer of the uterus. Therefore, the presence of the uterus, albeit removed, along with the vaginal cuff signifies that the structure where the cervix was attached remains as a closed space, marking the transition from the surgical site. The perimetrium, being the peritoneal covering of the uterus, is relevant as it remains intact around the vaginal cuff after the procedure. In contrast, the other choices do not accurately reflect the outcomes of a radical hysterectomy. For example, one option mentions only the uterus, which is not appropriate since the cervix is also removed, along with other tissues. Another option that suggests a partial liver resection is unrelated to the surgical focus of a radical hysterectomy and indicates a misunderstanding of the types of procedures involved. Therefore, the correct response adequately outlines the key anatomical changes and structures involved after the surgery.

3. What is the purpose of follow-up appointments post-cancer treatment?

A. To monitor for recurrence and manage any long-term side effects

B. To celebrate the end of treatment

C. To evaluate the effectiveness of the initial diagnosis

D. To introduce new treatment options

Follow-up appointments after cancer treatment serve a critical purpose in the ongoing management of a patient's health. The primary aim is to monitor for any signs of cancer recurrence. During these visits, healthcare providers will perform assessments and may utilize various diagnostic tools to detect any abnormalities that could indicate the return of cancer. Early detection of recurrence can significantly impact treatment options and outcomes. Additionally, these appointments are essential for managing long-term side effects associated with cancer treatments, such as chemotherapy and radiation. Many patients experience lingering effects that can affect their quality of life and overall well-being, hence follow-up visits provide an opportunity to address these concerns and implement strategies for effective management. While celebrating the end of treatment, evaluating the initial diagnosis, or introducing new treatment options are significant aspects of the cancer journey, they do not encompass the primary objectives of post-treatment follow-ups. Celebrations are essential for psychological support but do not contribute to monitoring health changes. Evaluating the initial diagnosis typically occurs during the treatment planning phase rather than follow-up. Introducing new treatment options may occur based on the patient's current status but is not the core focus of follow-up care.

4. During a modified radical mastectomy, which components are typically removed?

A. Breast tissue and chest wall muscle

B. Only lymph nodes

C. Only nipple and skin

D. Rectal tissue and surrounding organs

In a modified radical mastectomy, the primary components that are removed include the breast tissue, which encompasses the glandular tissue and skin, and a significant number of axillary lymph nodes. The chest wall muscles are typically preserved, particularly the pectoralis major and minor muscles, maintaining as much of the chest structure and muscle function as possible. This surgical procedure is designed to treat breast cancer while attempting to conserve underlying muscle to reduce complications and promote a better recovery outcome for the patient. The selected choice highlights the correct components of tissue removal during this procedure, ensuring that cancerous cells are effectively addressed while considering the patient's anatomical integrity. In the context of the other choices, they either suggest a removal of components that are not typically involved in this type of surgery or misrepresent the scope of the operation.

5. What is the primary treatment modality for malignant melanoma?

A. Chemotherapy with dacarbazine

B. Immunotherapy with pembrolizumab

C. Surgical excision with appropriate margins

D. Targeted therapy with trametinib

Surgical excision with appropriate margins is considered the primary treatment modality for malignant melanoma because it directly removes the tumor and any surrounding tissue that may harbor cancerous cells. Complete surgical excision is crucial, especially in early-stage melanomas, as it not only helps to eliminate the cancer but also provides important pathological information regarding tumor thickness and subtype, which can influence further treatment decisions. Surgical intervention remains the cornerstone of treatment because melanoma is highly linked to local recurrence and metastasis; thus, achieving negative margins is essential to reduce the risk of recurrence. If the melanoma is detected at an early stage, often surgical excision alone may suffice for treatment. In more advanced cases where the disease has metastasized, additional treatment options such as immunotherapy or targeted therapies become important but are considered adjuncts rather than the primary approach. While immunotherapy (e.g., pembrolizumab) and targeted therapies (e.g., trametinib) significantly improve outcomes for certain patients with advanced disease or specific genetic mutations, they are not the first-line treatment for localized melanoma. Instead, they are used after surgical excision when the cancer has progressed or spread. Similarly, chemotherapy, although an option in certain settings, is not the mainstay for melanoma treatment due to

6. What does the "M" in the TNM system represent?

A. Malignant potential

B. Metastasis to nearby organs

C. Distant metastasis

D. Minimal tumor burden

The "M" in the TNM system stands for distant metastasis. This component of the classification system is crucial as it helps to define the extent of cancer spread from the primary tumor to distant sites in the body. In cancer staging, understanding whether and how far the cancer has spread helps in determining the prognosis and treatment options for patients. Distant metastasis is a significant factor in assessing the overall stage of cancer and influences treatment decisions substantially, as metastatic cancer usually requires more aggressive intervention compared to localized disease. The classification is essential for oncologists to communicate the severity of the disease and develop an appropriate treatment strategy.

7. What does the term 'malignant neoplasm' typically refer to?

A. Benign tumors that do not spread

B. Cancerous tumors that invade surrounding tissues

C. Localized non-cancerous growths

D. All types of lumps in the body

The term 'malignant neoplasm' specifically refers to cancerous tumors that have the capability to invade surrounding tissues and structures. Malignant neoplasms are characterized by uncontrolled cell growth, which leads to the potential for metastasis—spreading to other parts of the body through the bloodstream or lymphatic system. This invasive behavior distinguishes malignant neoplasms from benign tumors, which do not invade surrounding tissues and are typically not life-threatening. In contrast to benign tumors, which may be localized and non-invasive, malignant neoplasms pose a significant health risk due to their aggressive nature and potential for metastasis. The term does not encompass localized non-cancerous growths or benign tumors, and it is not inclusive of all types of lumps, as some lumps can be benign or related to entirely different processes that do not involve malignancy. Therefore, the correct definition of 'malignant neoplasm' accurately captures its association with cancerous tumors and their invasive properties.

8. What cancer type accounts for the most deaths annually?

A. Breast cancer

B. Colorectal cancer

C. Lung and bronchus cancer

D. Pancreatic cancer

Lung and bronchus cancer is the leading cause of cancer-related deaths annually. Several factors contribute to this high mortality rate. Firstly, lung cancer is often diagnosed at a later stage when it is less treatable, resulting in poorer outcomes. The aggressive nature of the disease also plays a significant role; lung cancer tends to grow and spread quickly compared to some other cancer types. Additionally, risk factors such as smoking, exposure to secondhand smoke, and environmental factors increase the incidence of lung cancer significantly. Despite advances in treatment options, lung cancer still presents significant challenges, further contributing to its high mortality rate compared to other cancers such as breast, colorectal, and pancreatic cancer, which have lower overall death rates. Understanding these factors underscores the importance of prevention, early detection, and targeted treatment strategies to reduce the burden of lung cancer in the population.

9. What does TURBT stand for in surgical oncology?

A. Transurethral reduction of bladder tissue

B. Transurethral removal of bladder tumor

C. Transregional ultrasound bladder technique

D. Transurethral radius boundary treatment

TURBT stands for Transurethral Removal of Bladder Tumor, which is a standard surgical procedure used in the diagnosis and treatment of bladder cancer. This minimally invasive procedure involves the removal of tumor tissue from the bladder via the urethra. It is performed using a cystoscope, a thin tube with a camera and surgical instruments, allowing the surgeon to precisely target the tumor while minimizing damage to surrounding healthy tissue. This technique is crucial not only for the extraction of visible tumors but also for obtaining tissue samples for histological examination, which can help determine the type and grade of the bladder cancer. Additionally, TURBT can be used for therapeutic purposes, such as relieving blockages or symptoms caused by bladder tumors. The other options do not accurately describe this procedure. For instance, Transurethral reduction of bladder tissue suggests a focus on reducing tissue rather than specifically removing tumors, which lacks the specificity of TURBT. Similarly, terms like "Transregional ultrasound bladder technique" or "Transurethral radius boundary treatment" are not recognized terms within the context of bladder cancer surgery. Thus, understanding the definition of TURBT and its role in oncology is essential for recognizing its significance in the management of bladder cancer.

10. What is typically expected on the grossing table following a salpingectomy?

A. Two uterine tubes

B. One uterine tube unless designated by bilateral

C. Fragments of the uterus

D. Complete reproductive system

In a salpingectomy, the surgical procedure involves the removal of one or both fallopian tubes. Therefore, if the surgery is unilateral (removal of one tube), the expected finding on the grossing table would be one uterine tube unless the procedure was specifically designated as bilateral. If it were a bilateral salpingectomy, two tubes would be present, but the question indicates a typical outcome without specifying bilateral involvement. The other options do not accurately reflect what is expected during this procedure. A complete reproductive system would suggest the removal of all reproductive organs, including the ovaries and uterus, which is not associated with a standard salpingectomy. Fragments of the uterus pertain to different types of procedures, such as a hysterectomy or when complications arise. Thus, the typical finding is indeed one uterine tube unless otherwise stated.