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Chemotherapy

Patient name: _____ Admission: _____

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- I. The client/caregiver can define chemotherapy.**
- A. Chemotherapy (or antineoplastic drugs) is the use of one or more drugs to destroy or slow the growth of malignant tumor cells.
 - B. Antineoplastic drugs are toxic to normal and abnormal cells.
 - C. It can be given alone or in combination with surgery or radiation.
 - D. Chemotherapy can be given in several ways:
 - Oral (by mouth)
 - Injection (into a muscle, under the skin, or directly into a cancerous area in the skin)
 - Topically (applied to the skin)
 - Delivered intravenously through needle, or catheter (central venous catheter, peripherally inserted central catheter [PICC])
 - Intrathecal—delivered into the spinal fluid
 - Intracavitary—delivered in the abdomen, pelvis, or chest
 - E. Medicines that help speed recovery of white blood cells, called colony-stimulating factors (CSF), are often ordered by the physician during chemotherapy.

II. The client/caregiver can name most common side effects of chemotherapy and measures to prevent or manage them.

- A. Infections caused by a low white blood count
 1. Wash your hands often such as before you eat, after you use bathroom, or after touching animals.
 2. Obtain prompt treatment for any signs of infection.
 3. Avoid people with upper-respiratory infections, flu, or chicken pox.
 4. Avoid crowds.
 5. Stay away from children who recently received “live virus” vaccines.

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- 6. Maintain good nutrition and fluid intake.
 - 7. Avoid cuts and scrapes. Clean and treat cuts/scrapes promptly.
 - 8. Cook and prepare food carefully to prevent bacteria.
 - 9. Take a warm (not hot) bath or shower and pat dry. Use lotions to soften the skin.
 - 10. Do not eat raw fish, seafood, meat, or eggs.
 - 11. Avoid contact with animal litter boxes, bird cages, and fish tanks.
- B. Nausea and vomiting**
1. Take medication to control nausea before treatment and as needed.
 2. Avoid odors that increase nausea.
 3. Eat small, frequent meals.
 4. Eat foods cold or at room temperature to avoid strong smells.
 5. Avoid sweet, fried, or fatty foods.
 6. Drink cool, clear, unsweetened fruit juices, such as apple juice. Use light-colored sodas that have lost their fizz. Avoid caffeine.
 7. Rest, but sit up at least 2 hours after meals.
 8. Breathe deeply and slowly when nauseated.
 9. Notify physician if vomiting is severe or lasts over 24 hours.
- C. Mouth sores and/or dry mouth**
1. Use mouthwash of salt, baking soda, or hydrogen peroxide, avoiding commercial mouthwashes with alcohol that dry mucous membranes.
 2. Avoid spicy or acidic foods.
 3. Avoid alcohol and use of tobacco products.
 4. Perform good oral hygiene using toothettes or glycerin swabs.
 5. Obtain routine dental exams.
 6. Brush teeth regularly with soft toothbrush and floss.
 7. Eat foods cold or at room temperature.

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8. Eat soft foods such as
 - Ice cream, milkshakes, yogurt, cottage cheese, and puddings
 - Soft fruits such as bananas or applesauce
 - Baby foods or puree cooked foods
 9. Suck on ice chips, popsicles, sugarless hard candy, or sugarless chewing gum. Sorbitol is a sugar substitute that can cause diarrhea. Check labels if you are having problem with diarrhea.
 10. Use artificial saliva. Use lip balm or lubricant to lips.
 11. Drink plenty of liquids. Cover water bottle.
- D. Hair loss (alopecia)
1. Change hairstyle (usually shorter hairstyles look thicker).
 2. Purchase wig or hairpiece.
 3. Wash hair gently (with mild shampoo), and use a soft bristled hairbrush.
 4. Use only low heat when drying hair.
 5. Avoid permanents and hair coloring.
 6. Use sunscreen, a hat, or a scarf to protect scalp.
- E. Susceptibility to bleeding due to low platelet count
1. Prevent injury or cuts by using an electric razor. Use a soft toothbrush, and avoid going barefooted.
 2. Prevent constipation (may cause rectal bleeding).
 3. Avoid use of aspirin and aspirin products.
 4. Symptoms to report to physician are
 - Reddish or pink urine
 - Black or bloody bowel movements
 - Bleeding from gums or mouth
 - Vaginal bleeding that lasts longer than a regular period
 - Unexpected bruising or small, red spot under the skin
 - Changes in vision
- F. Diarrhea
1. Eat bland, high-carbohydrate, low-fiber foods.
 2. Drink plenty of fluids. Use clear broth, sport drinks, and carbonated drinks that have lost the fizz. Drink slowly, and have drinks at room temperature.
 3. Eat small amounts of food throughout the day.
 4. Eat BRAT diet of bananas, rice, apples, and tea.

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5. Take antidiarrheal medicine as ordered.
 6. Avoid hot or very cold liquids.
 7. Limit milk and milk products if they make diarrhea worse.
 8. Avoid coffee, tea with caffeine, and alcohol.
 9. Notify physician if diarrhea is severe or lasts several days.
- G. Constipation
1. Eat high-fiber foods (i.e., fresh fruits and vegetables and whole grain breads and cereals).
 2. Increase fluids.
 3. Increase exercise.
- H. Fatigue and anemia
1. Chemotherapy can reduce the bone marrow's ability to produce red blood cells. This results in body tissue not getting enough oxygen (anemia).
 2. Symptoms of anemia are
 - Fatigue (complaints of feeling weak and tired)
 - Dizziness or feeling faint
 - Shortness of breath
 - Feeling your heart "pounding" or beating very fast
 3. Measures to help fatigue and anemia are
 - Plan activities with time to rest.
 - Take naps or breaks during the day.
 - Save energy for the most important activities.
 - Try modified (easier or shorter) versions of activities.
 - Do light exercise if possible.
 - Eat and drink fluids as tolerated.
 - Limit the use of caffeine and alcohol.
 - Accept help from others.
 - Try complementary therapies, such as guided imagery and mediation.
 - Change positions (sitting to standing, etc.) slowly to avoid dizziness or loss of balance.
- III. The client/caregiver can list general health measures when receiving chemotherapy.
- A. Obtain adequate rest to prevent fatigue.
 - B. Eat a high-protein, high-carbohydrate diet.
 - C. Drink fluids up to 3000 ml per day.
 - D. Keep follow-up appointments with physician and laboratory.
 - E. Be informed about disease and treatment.
 - F. Seek support groups for information and emotional support.

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- G. Read the booklet *Taking Time: Support for People with Cancer*, produced by the National Cancer Institute at www.cancer.gov/cancertopics/takingtime.

RESOURCES

American Cancer Society
800-227-2345
www.cancer.org/

National Cancer Institute
www.cancer.gov/

Support groups

REFERENCES

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