

# Understanding Hormonal Side Effects During Cancer Treatment

Menopause usually happens naturally as women get older when their ovaries make less estrogen. Some cancer treatments can harm the ovaries, causing menopause symptoms to start. These symptoms may continue even after cancer therapy.

Some types of breast cancer are affected by hormones like estrogen and progesterone. Treatments that block these hormones from helping the cancer grow are called "hormone therapy" or "endocrine therapy."

Side effects of hormone therapy are similar to menopause symptoms because they also lower estrogen levels.

## Possible Side Effects

| Side Effect | Management                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Hot flashes | <p>Description: Hot flashes are sudden feelings of warmth that spread over your body, often leading to sweating and a rapid heartbeat. Hot flashes may last from a few seconds to several minutes and can be uncomfortable or disrupt daily activities.</p> <div> <div>Recommendations:</div> <ul style="list-style-type: none"> <li>• Wear loose fitting clothing, dress in layers.</li> <li>• Stay hydrated with cool liquids.</li> <li>• Avoid alcohol, caffeine and foods that are hot or spicy.</li> <li>• Sleep in a cool room on cotton sheets.</li> <li>• Participate in mild, regular exercise.</li> <li>• Carry a portable fan.</li> <li>• Keep a personal hot flash diary to record the number, how often, how severe, and the timing of hot flashes so you can identify and avoid the personal triggers that cause your hot flashes.</li> </ul> </div> <div> <div>Talk to your care team if you have:</div> <ul style="list-style-type: none"> <li>• Severe hot flashes</li> </ul> </div> |

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| <p>Bone Thinning</p>                    | <p>Description: When your bones become less dense, they can become weak and brittle.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>• Eat plenty of calcium-rich foods. Some examples include dairy products, almonds, broccoli, kale, canned salmon with bones, and sardines.</li> <li>• Take a Calcium and Vitamin D supplement as recommended by your care team.</li> <li>• Exercise most days of the week. Weight bearing activities, such as walking, jogging, and climbing stairs, can help build strong bones and slow bone loss.</li> <li>• Do not smoke.</li> <li>• Avoid alcohol.</li> </ul>                                                                                                                                                                                                                                                      |
| <p>Muscle or Joint Pain or Weakness</p> | <p>Description: Muscle pain feels like soreness, aches, cramps, or stiffness in one or more muscles. It may also include tenderness or weakness. Joint pain happens where two bones come together and can feel sharp, dull, throbbing, or burning. It often causes stiffness, swelling, and difficulty moving.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>• Keep a diary of your pain, including a description of when and where the pain is occurring, what it feels like, and how long it lasts.</li> <li>• Stay as active as possible but know that it is okay to rest as needed, too.</li> <li>• Take only pain medication that has been prescribed or recommended by your care provider.</li> </ul> <p>Talk to your care team if you have:</p> <ul style="list-style-type: none"> <li>• Pain that interferes with your daily activities</li> </ul> |
| <p>Hair Thinning</p>                    | <p>Description: Partial loss of hair that results in visibly reduced density of hair on the scalp.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>• Avoid hairstyles that pull on hair.</li> <li>• Avoid high heat hair styling tools.</li> <li>• Use a soft brush with natural fiber.</li> </ul> <p>Talk to your care team if you have:</p> <ul style="list-style-type: none"> <li>• Hair thinning that is bothersome</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| <p>Vaginal Dryness</p> | <p>Description: Thinning, drying, and swelling of vaginal tissue.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>• <b><u>Vaginal moisturizers</u></b> are used on a regular basis to maintain vaginal moisture and health of tissue. They can be used at any time and several times a week for overall vaginal health and comfort.                     <p><b><i>Natural oil</i></b> moisturizers may be applied with the fingertip to the outside or inside vaginal area.</p> <ul style="list-style-type: none"> <li>○ Coconut oil</li> <li>○ Olive oil</li> <li>○ Vitamin E – comes as a suppository, oil, or capsule. To use the capsule, break it open and apply the oil to the vagina with your fingertips.</li> </ul> <p><b><i>Commercial moisturizers</i></b> can be found in the feminine hygiene section of your drug store. Most are inserted into the vagina using</p> </li> <li>• <b><u>Vaginal lubricants</u></b> are used during sexual activity to help you feel more comfortable.                     <p><b><i>Natural oil</i></b> lubricants can be used inside or outside of your vagina. Do not use oil-based lubricants if you are using a latex condom.</p> <ul style="list-style-type: none"> <li>○ Coconut oil</li> <li>○ Vitamin E</li> </ul> <p><b><i>Water-based</i></b> lubricants can be found at your drug store or online.</p> <p><b><i>Silicone-based</i></b> lubricants can be found at your drug store or online.</p> <ul style="list-style-type: none"> <li>○ Always use water or silicone-based lubricant if you are using a latex condom.</li> <li>○ Never use petroleum jelly as a vaginal lubricant as it can increase the chance and severity of vaginal yeast infections.</li> </ul> </li> </ul> <p>Talk to your care team if you have:</p> <ul style="list-style-type: none"> <li>• Uncontrolled vaginal dryness</li> </ul> |
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| Swelling or Fluid Retention | <p>Description: Swelling and fluid retention can occur in different areas of the body, like the legs or hands. You might notice areas feel puffy or tighter than usual.</p> <p>Recommendations:</p> <ul style="list-style-type: none"><li>• Do not stand for long periods of time.</li><li>• Keep your legs elevated when sitting or lying down.</li><li>• Avoid eating salty foods, which can increase swelling.</li><li>• Avoid wearing tight-fitting clothing and shoes.</li><li>• Weigh yourself daily.</li></ul> <p>Talk to your care team if you have:</p> <ul style="list-style-type: none"><li>• Swelling in the hands, feet, or legs</li><li>• Shortness of breath</li><li>• Weight gain of 5 pounds or more in a week</li></ul> <p>Note: If you have swelling after surgery to remove lymph nodes, you may be experiencing lymphedema. Notify your care team immediately.</p> |
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Notes

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Scan the QR code below to access this education sheet.



Important notice: The Association of Cancer Care Centers (ACCC), Hematology/Oncology Pharmacy Association (HOPA), Network for Collaborative Oncology Development & Advancement, Inc. (NCODA), and Oncology Nursing Society (ONS) have collaborated in gathering information for and developing this patient education guide. This guide represents a brief summary of the medication derived from information provided by the drug manufacturer and other resources.

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