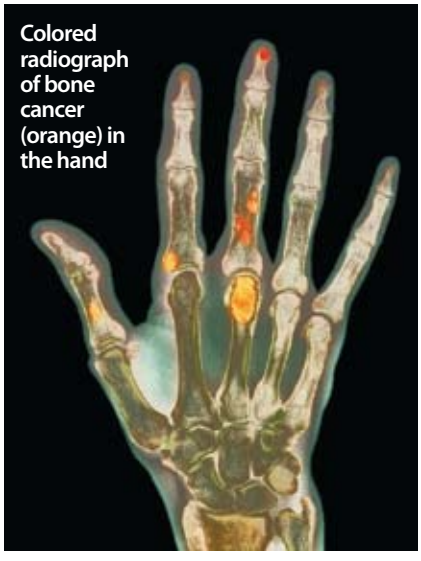

Colored radiograph of bone cancer (orange) in the hand



# Drug-related skeletal effects and managing vaginal dryness

### What issues should nurses be aware of when administering denosumab to patients?

Denosumab (Prolia, Xgeva) is a monoclonal antibody that inactivates RANKL, a protein that enhances osteoclast activity and survival. By inhibiting RANKL, denosumab prevents skeletal-related events in patients with bone metastasis from solid tumors. Denosumab is not indicated for patients with multiple myeloma. Studies that compared denosumab to zolendronic acid (Reclast, Zometa) found that the time to a skeletal-related event was longer in patients who received denosumab than the time to a skeletal-related event in patients who received zolendronic acid. However, overall survival was not improved.

Patients receiving denosumab should have normal calcium levels when treatment is started and receive supplemental calcium and vitamin D as necessary. The most common adverse effects experienced by patients receiving denosumab are fatigue, asthenia, nausea, and low phosphate and calcium levels. Patients receiving denosumab should also have electrolyte monitoring and should be made aware of the risk for osteonecrosis. Denosumab has not been studied in patients on dialysis or with a creatinine clearance of less than 30 mL per minute.

Denosumab is administered subcutaneously in the upper arm, thigh, or abdomen. The recommended dose is 120 mg subcutaneously every 4 weeks, and the drug is available in a 120 mg/1.7 mL single-use vial (Xgeva). Denosumab should be stored in a refrigerator, then warmed to room temperature in the original container for approximately 15 to 30 minutes before administration. Do not use any other methods to warm the product.

### What are the best strategies for managing vaginal dryness caused by hormonal therapy for breast cancer?

Women being treated with tamoxifen (Nolvadex) or aromatase inhibitors, as well as other hormonal therapies for breast cancer, may experience vaginal dryness. Unlike other menopausal symptoms such as hot flushes, vaginal dryness may actually worsen as antiestrogen therapy continues for a longer period of time. Some studies have noted that up to 50% of patients being treated for breast cancer experience symptoms of vaginal dryness after 5 years of treatment.

Nonhormonal therapies are the first-line treatment for vaginal dryness. Typically, a vaginal lubricant (eg, KY Jelly, Astroglide) is used as needed and prior to sexual activity. Polycarbophil vaginal moisturizers (eg, Replens) used three times a week also effectively decrease vaginal itching and irritation. Studies have shown that both water-based lubricants and polycarbophil vaginal moisturizers are similar in efficacy. Pilocarpine, a cholinergic agonist that stimulates secretions, has also been studied as a treatment for vaginal dryness. Preliminary data from a trial of 200 patients indicates that pilocarpine may not be effective; however, further studies are currently ongoing.

Because of the potential for systemic absorption of estrogen, estrogen-containing products should be avoided unless patients have failed nonhormonal therapy. Because some systemic absorption of estrogen may occur, a low-dose vaginal estrogen product (eg, Estring vaginal ring) should be used. However, systemic estrogen products should be avoided altogether in patients who have a history of or are being treated for breast cancer. ■

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