Cancer Treatment-Induced Bone Loss
in Patients With Breast or Prostate Cancer

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Purpose/Objectives: To review the prevalence, consequences, pathophysiology, diagnosis, and treatment of cancer treatment-induced bone loss (CTIBL) in patients with breast or prostate cancer.

Data Sources: Published articles, abstracts, book chapters, electronic resources, and manufacturer information.

Data Synthesis: CTIBL is a long-term complication associated with cancer therapies that cause hypogonadism in patients with breast or prostate cancer. Early diagnosis and treatment of CTIBL is essential to prevent bone fractures. CTIBL treatment includes modification of lifestyles that increase the risk of developing bone loss and fractures and includes the use of bone loss therapies (e.g., bisphosphonates, selective estrogen receptor modifiers, calcitonin).

Conclusions: CTIBL is becoming more common as patients with breast or prostate cancer survive longer. Identifying and treating CTIBL early are important because once bone is lost, damaged bone becomes more difficult to repair; early diagnosis and treatment also may prevent fractures.

Implications for Nursing: Nurses must be knowledgeable about CTIBL to identify high-risk patients and educate patients and their families about CTIBL, bone loss therapies, and lifestyle modifications.

Goal for CE Enrollees:
To enhance nurses’ knowledge about cancer treatment-induced bone loss (CTIBL) in people with breast or prostate cancer.

Objectives for CE Enrollees:
1. Describe factors that can place a person with breast or prostate cancer at risk for CTIBL.
2. Outline the assessment and diagnostic measures used to evaluate a person with CTIBL.
3. Discuss interventions that should be included in a plan of care for a person with CTIBL.