CT Scans for Incidental Osteoporosis Screening

Abdominal computed tomography (CT) scans obtained for other clinical indications can be used to screen patients for osteoporosis. Central dual-energy x-ray absorptiometry (DXA) of the hips and lumbar spine is widely recognised as the reference standard for diagnosing osteoporosis, yet the procedure is underused. Nearly half of all female Medicare beneficiaries have never had a bone mineral density (BMD) test.

Recognizing a need for alternatives to DXA screening, researchers sought to determine if CT scans performed for other clinical indications could be used to assess BMD. Researchers compared CT scans to DXA scans performed within 6 months of the CT for 1,867 patients over a 10-year period. They found that nearly half of patients with an osteoporotic vertebral compression fracture identified by the CT scan had been classified as having normal bone density by the DXA scan.

The researchers conclude that CT scans can be used opportunistically to screen for osteoporosis without additional radiation exposure or cost.

However, the authors of an accompanying editorial caution against adding more information to CT reports already replete with incidental findings, as only about half of incidental findings are ever acted on or confirmed. The authors suggest that CT reports linked to evidence summaries and actionable reminders that could be transmitted to primary care physicians may be a more effective way to increase the likelihood of follow up and treatment.


Published on: Tue, 14 May 2013