Vertebral Fracture Assessment with Densitometry or Biomechanical Computed Tomography

DESCRIPTION

Vertebral fracture assessment (VFA) with densitometry is a technique to assess vertebral fractures at the same time as bone mineral density, using additional software with dual-energy x-ray absorptiometry (e.g., GE Lunar DXA Bone Densitometers with enCORE, Aria, TBS iNsight). VFA differs from radiologic detection of fractures because VFA uses a lower radiation exposure and can detect only fractures, while traditional radiograph images can detect other bone and soft tissue abnormalities in addition to spinal fractures. Manufacturers have also referred to this procedure as instant vertebral assessment, dual-energy vertebral assessment, or lateral vertebral assessment.

Biochemical computed tomography (e.g., VirtuOst) is another method to assess vertebral fractures by minimizing radiation exposure. CT scans that have been obtained previously are sent to a centralized laboratory and using non-linear finite element analysis a fracture event is simulated along with using T scores and Z scores to calculate if an individual is low, moderate or high risk for fracture. Some professional organizations mention them as being used in mostly research settings and occasionally clinical practice as a fracture risk assessment tool.

Only 20% to 30% of vertebral fractures are recognized clinically; the rest are discovered incidentally on lateral spine radiographs. Lateral spine radiographs have not been recommended as a component of risk assessment for osteoporosis due to cost, radiation exposure, and the fact that the radiograph would require a separate procedure in addition to the bone mineral density study using dual-energy x-ray absorptiometry

The proposal is to add words or statements in red and delete words or statements with a strike through.

POLICY

- Vertebral Fracture Assessment using dual x-ray absorptiometry (DEXA or DXA) or biochemical computed tomography is considered ***investigational.***

IMPORTANT REMINDERS

- Any specific products referenced in this policy are just examples and are intended for illustrative purposes only. It is not intended to be a recommendation of one product over another and is not intended to represent a complete listing of all products available. These examples are contained in the parenthetical e.g. statement.
- We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the medical policy and a health plan or government program (e.g., TennCare), the express terms of the health plan or government program will govern.

ADDITIONAL INFORMATION

The most recent recommendation from the U. S. Preventive Services Task Force on screening for osteoporosis does not address ~~this technology~~ either of these technologies.

SOURCES

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EFFECTIVE DATE

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