

Newsletter April/May 2005 Number 6

Our Facility

We use a state of the art GE Lunar Prodigy densiometer with the capacity for vertebral fracture assessment (VFA).

If you, or your staff, are interested in trying this technology for yourself, please schedule with Patty von Grueningen, our office manager.

She can also provide you with brochures, script pads or whatever other information you might need.

You can reach Patty at ext. 102.

Spruce Street Osteoporosis Center

2575 Spruce St. Boulder, CO 80302

303.449.3594 fax 447.0462

Medical Director: Hillary L. Browne, MD, FACP

Vertebral fracture Assessment

Vertebral fracture assessment (VFA) utilizes DXA imaging of the lateral spine to assess for spinal compression fractures. These images may not be as clear as x-rays, but are helpful in identifying vertebral compression fractures.

Why order VFA?

Two-thirds of vertebral fractures are asymptomatic and almost half of women with vertebral fractures do not have osteoporosis by WHO criteria. A quarter of women over 50 have vertebral fractures.

Having a vertebral fracture is the most predictive factor for subsequent fracture (e.g.: older women with vertebral fractures have a 5-fold increased risk of new vertebral fracture and a 2-fold increased risk of hip fracture)

A single vertebral fracture almost never causes disability; it is the "cascade of fractures" that follows the first fracture that leads to disability.

With parathormone treatment, we can decrease the risk of a subsequent vertebral fracture by 75 to 90%.

Advantages

- "Point of service": done at same time as bone density
- Low radiation: less than 5% that of a conventional x-ray
- image of entire spine
- digitalized: allows accurate morphometric measurements

Limitations / Disadvantages:

- Poor visualization above T-7
- Not always as clear or interpretable as x-rays



VFA may be limited by

- Scoliosis
- Motion
- Rib/scapula shadows
- Bowel gas
- Calcifications

The International Society of Clinical Densiometry (ISCD) has a task force developing official indications.

Preliminary indications:

- Females, 65 or older
- Men 70 or older
- known height loss >1.5"
- BMD evidence of osteoporosis at the hip or spine
- Kyphosis
- long term glucocorticoid therapy (>5 mg for > 3 months)

Contraindications:

- recent imaging of the spine that can be reviewed for incident fractures
- pregnancy
- If VFA will not alter the therapeutic/clinical course