

AOA 2021 Annual Own the Bone Symposium: Case Studies

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Disclosures

Current: Speaker Bureau Amgen

Co-chair AOA Own the Bone Symposium

Consultant AOA Own the Bone Steering Committee and
the Education Subcommittee

Previous: Speaker Bureau Radius Health

Objectives

- Investigate multidisciplinary post fracture management and prevention strategies related to osteoporosis/ bone health through case studies
- Discuss operational workflow including entry into the system; referral processes to FLS; post-discharge opportunities

- 67 yr old WF, fall from standing with a R) DR fracture
- Seen at urgent care and referred to ortho hand for f/u
- PA at ortho hand referred her to the Osteoporosis/ Bone Health clinic
- PMH: Hypothyroidism Meds: Levothyroxine 0.112 mcg
GERD Omeprazole 20 mg
Hypertension Lisinopril/ HCTZ 10/12.5

Case Study #1

Case Study #1

- 62" 180 lbs
- Labs: CBC w/ diff, CMET (ca 9.2, creat 0.71), Mg, Phos, PTH, TSH- NI
- Vitamin D **20 ng/ml** (30-100)
- DXA LS T -2.4, R) FN T -2.4
- FRAX Hip 4.6% MOF 21%

Diagnosis?

- A. Osteopenia
- B. Osteoporosis

A. Oral bisphosphonate

B. IV bisphosphonate

C. Denosumab

D. Anabolic

E. Calcium/Vitamin D only

Treatment?

Case Study #2

- 70 yr old WF, fall while walking on a golf course
 - L) intertrochanteric hip fx
 - 69" 151 lbs
 - PMH: Osteopenia
Vitamin D deficiency
Hyperlipidemia
DR fx age 51, slip on ice
- Nonsmoker, 2-3 glasses wine per week

- Currents Meds: Calcium + D, Vitamin D 5,000 IU daily, Multivitamin, Fish oil
- Labs: Vitamin D 75 ng/ml, CMET WNL (Ca 8.8, creat 0.74), Mg NI, TSH NI
- Most recent DXA 2 ½ yrs ago lowest T score L) total hip T - 1.4
- FRAX: Hip 2.2%, MOF 15%

In-patient Workflow

Osteoporosis Management section in the General Orthopedic Order Set

- Consult FLS (Drops automatically into the RN Nurse Navigator's work que)
- 25 OH total Vitamin D
- Calcium 500 mg twice a day, Vitamin D 50,000 IU weekly x 8 weeks

Seen by the FLS RN Nurse Navigator in the hospital

- Counseled on the link between falls, fractures and osteoporosis
- Counseled on the importance of calcium, vitamin D, weight bearing exercise, fall prevention
- Outpatient DXA scheduled and outpatient appointment scheduled with the NP in the Osteoporosis/ Bone Health Clinic
- Written information given to the patient/ family
- Data input into the Own the Bone Registry
- Letter sent to PCP

FLS RN Nurse navigator follows up with the patient/ family ~1 week before DXA appointment to remind them of the appointments, answer any questions

Case Study #2

- 70 yr old WF, fall while walking on a golf course
L) intertrochanteric hip fx
- DXA: Lowest T score R)
Total hip -1.5. 0.824 g/cm²
decrease from 0.845 g/cm²
- Labs: Ca 9.9, Creat 0.74,
PTH, phos- WNL



Diagnosis?

- A. Osteopenia
- B. Osteoporosis

A. Oral bisphosphonate

B. IV bisphosphonate

C. Denosumab

D. Anabolic

E. Calcium/Vitamin D only

Treatment?

Case Study #3

66 yr old WF ground level fall while raking leaves

Seen in the ED with a R)DR fx. Follow up with Ortho Hand

Referred to the Osteoporosis/ Bone Health Clinic by her PCP

Out-patient Workflow

1. Ambulatory referral to the Osteoporosis/ Bone Health Clinic which may be placed by provider in the ED, Ortho Hand, or by the PCP done through the EHR
2. FLS/ RN Nurse Navigator reviews ED consults by ortho
3. Automatically placed by the system based on set criteria (≥ 50 yrs old, fall, fracture)
4. Use the EHR to run reports with set criteria and that info given to the FLS

Case Study #3

- 66 yr old with DR fx , 63" 109 lbs
- Meds: Calcium + D bid, multivitamin
- PMH: Early menopause age 44, no HRT
Vitamin D deficiency
- SH: Smokes ½ ppd x 40 yrs. Rare alcohol
- FH: Mother with a hip fx age 70
- No prior hx of fx

Case Study #3

- DXA: Hologic LST -4.5 (0.556 g/cm²)
L) FNT -3.2 (0.499 g/cm²)
- Labs: CBC w/ diff, TSH, PTH, Mg, Phos, CMET- WNL (Ca 10.0, Creat 0.71)
- Vitamin D 54 ng/ml
- 24 hour urine calcium/ creat WNL

A. Oral bisphosphonate

B. IV bisphosphonate

C. Denosumab

D. Anabolic (Teriparatide/ Abaloparatide)

E. Romosozumab

Treatment?

References

- National Osteoporosis Foundation Clinicians Guide to Prevention and Treatment of Osteoporosis

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Questions???

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