STANDARD TREATMENT WORKFLOW (STW)

Fragility Fractures

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Standard Treatment Workflow (STW)

FRAGILITY FRACTURES

ICD-10-Z87.310

WHAT ARE FRAGILITY FRACTURES

- To be suspected in fractures resulting from trivial trauma or fall from a standing height or less
- For example fracture neck of femur, forearm fracture (Colle’s), vertebral fracture

WHAT TO ASK?

- Postmenopausal females
- Renal stone disease
- Premature ovarian failure (less than 40 years)
- Use of antiepileptics like phenytoin etc
- Chronic systemic illnesses like rheumatoid arthritis
- Smoking, chronic systemic diseases, CKD, CLD,
  Endocrine disorders. Thyroid disorders, Hypogonadism

INVESTIGATIONS

Biochemical:
- Fasting serum calcium, phosphate, alkaline phosphatase and albumin
- Hemoglobin, hemogram, electrolytes, proteins in serum or urine
- Fasting blood glucose, PTH (parathyroid)
- 25 hydroxy Vitamin D, IgA (Tg)
- Renal function tests, bone markers beta cross LAP

Bone imaging:
- DXA scan osteoporosis T score-osteoporosis +2.5 severe osteoporosis: fracture or T score < -3.0
- X-ray of fracture site: Use 2 score for age less than 50 for men and premenopausal women
- X-ray lumbar spine (Lateral), pelvis (AP), skull (lateral), both hands

Ultrasound abdomen, gall stones, renal stones and nephrolithiasis. Ultrasound neck, enlarged parathyroid
Sestamibi scan for parathyroid enlargement

HOW TO TREAT?

Resuscitate the patient if needed
Stabilize the fracture

TREATMENT

- Daily oral calcium 1.5 gm/day
- Vitamin D supplementation to maintain serum
  25OHD levels of 30.0-50 ng/ml
- Stop smoking alcohol

- Inf Zoledronic acid 5mg IV infusion OR
- Inf Denosumab 60mg SC every 6 months OR
- Inf rPTH 20 µg SC daily for maximum 2 years

TREATMENT

Abbreviations:

CKD: Chronic kidney disease
CLD: Chronic liver disease
rPTH: recombinant Parathyroid hormone

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

This STW has been prepared by national experts of India with flexibility considerations for various levels of healthcare systems in the country. These broad guidelines are advisory and are based on expert opinion and available scientific evidence. These may be variations in the management of an individual patient based on her/his health condition, as described by the STW and with the help of expert opinions. The STW aims to provide a framework for standardizing the management of patients. It is recommended that healthcare professionals have access to the latest scientific evidence and guidelines to make informed decisions. This STW is not a substitute for professional medical advice.

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