

Connecting to patients (Published case reports on real people.)

Read the Case Report article in this week's BlackBoard folder. Trust that the authors are correct when they tell you which pictures reflect injury, and which one a healed injury: you may not see the same signs of trouble they do. For some of the issues covered in this activity, you may find it useful to go back to your Biology 260 notes or Marieb's explanation of how we regulate the activities of cells in bone.

Outside resource suggestion: Medical dictionary at <http://www.nlm.nih.gov/medlineplus/medlineplusdictionary.html>

1. The authors present their patient's problem as a descriptive phrase that condenses a great deal of **information**: explain and/or expand on what is meant by:

bilateral:

undisplaced:

femur neck fracture:

stress fracture:

(In the interests of [accuracy](#) and [precision](#), make sure your expansion of "stress fracture" applies equally well to an insufficiency stress fracture and a fatigue stress fracture - check the later parts of the article to find these terms.)

2. The authors introduce the concept of intrinsic osteopenia and iatrogenic osteopenia: which kind do the authors seem to think is the condition in this case and why?

Text in Red

Indicates the infusion of the **Elements of Reasoning**

Text in Blue

Indicates the infusion of the **Intellectual Standards**

Text in Green

Indicates the infusion of the **Intellectual Traits**

[Bracketed Text]

Indicates the indirect use of critical thinking **[Elements]**, **[Standards]**, or **[Traits]**

[View more about the Paul-Elder Framework of Critical Thinking](#)

3. The authors in this report are presenting a hypothesized chain of cause and effect: it is important to their **logic** that the patient had no history of traumatic injury or intense physical activity. How would these authors' "case" (in the sense of a **logical** argument) be weakened if the patient's recent history included a fall or attempted heavy lifting?

4. The authors describe one effect of corticosteroid treatment as secondary hyperparathyroidism. a) What condition normally stimulates the parathyroid gland to increase its activities? (BIO 260 issue)

b) Some, but not all, of the actions of prednisone could lead to the condition you identified in 'a'. b1: Would decreased osteoblast activity lead to the condition you identified in 'a'? Why or why not?

b2) Would decreased calcium absorption from the digestive tract help cause the condition in 'a'? Why or why not?

c) What will high levels of parathyroid hormone do to bone strength, and why?

5. Articles like this are generally written with a **purpose** in mind. If these authors have achieved their **purpose**, what kind of clinical behavior change would they hope to see from other doctors?