

THERAPY UNIT

Objectives:

To learn to apply the results of therapeutic studies to clinical practice.

This includes:

1. Determining the study's validity
2. Interpreting the results
3. Applying them to clinical practice

Assignment:

1. Read the clinical scenario
2. Read the attached guidelines for reading articles concerning therapy
3. Critically appraise the attached article using the worksheet
4. Decide how you would respond to the problem

Clinical Scenario:

You are a busy orthopaedic surgeon in a trauma-based practice. Your practice is located in a large urban city and you see approximately 30 elderly patients with hip fractures each month. A visiting resident is rotating with you for a 6 week rotation and wishes to discuss a case she just seen in the emergency room.

Briefly, she reports on a 70 year old woman who has experienced a fall from standing height. This accident has produced a hip fracture. Radiographs confirm this diagnosis and also show that the patient has sustained an undisplaced (Garden type II) fracture at the base of her femoral neck (also called basi-cervical fracture). No other fractures or injuries were sustained from the fall. Prior to the fall, the patient is relatively active (walks for 30 minutes in a mall most days) and has a normal BMI. The patient is a current smoker who has smoked for 45 years and has high blood pressure.

In discussing this case, your elective resident states that she has already filled in the consent form for an open reduction internal fixation of the femoral neck fracture. She has discussed the case with the OR and has ordered instruments for it. Among these are cancellous screws or a sliding hip screw to fix the fracture. She states that he read an article suggesting sliding hip screws result in better outcomes for patients with basi-cervical femoral neck fractures and patients who smoke. She asks if you agree with his implant decision. You ask her to bring you the enclosed article to review. Does this patient need a sliding hip screw?

Enclosed Materials:

1. Therapy (Randomized Trials). In Guyatt G, Rennie D, Meade MO, Cook DJ. Users' Guide to the Medical Literature: A Manual for Evidence-Based Clinical Practice, 3rd Edition, New York, NY: The McGraw-Hill Companies, Inc. 2014.

2. Bhandari M, Guyatt GH, Swiontkowski MF: User's guide to the orthopaedic literature: how to use an article about a surgical therapy. *The Journal of bone and joint surgery* 2001, 83-A(6):916-926.
3. Fixation using Alternative Implants for the Treatment of Hip fractures (FAITH) Investigators. Fracture fixation in the operative management of hip fractures (FAITH): an international, multicentre, randomised controlled trial. *Lancet*. 2017 Mar 2. pii: S0140-6736(17)30066-1. [Epub ahead of print]

Activities

1. Complete a critical appraisal for the enclosed article
2. Discuss how you would respond to the problem