



# **MEDICAL DECISION-MAKING CASE STUDIES MATTERS OF JUDGEMENT**

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This workshop will explore medical decision making through discussion of illustrative NOLS case studies. We will look at how medical protocols can be used to guide decision-making and the reality of clinical judgment in the field.



# THE WFR VERSUS REALITY

In WFR courses patients have classic symptoms, treatments usually work, and time is compressed.

In the real world patients aren't "textbook" and changes in presentation can occur slowly.

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In WFR courses we often stop at the EVAC decision.

In the real world evacuation can be difficult, lengthy, and stressful and long term care is a reality

# THE WFR RECERT VERSUS REALITY

In the WFR Recert we start trying to predict patterns and looking for “the answer”.

In the real world patients aren’t “textbook” and often there is no “answer”.

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In WFR Recert courses we equate our limited experience for clinical judgment.

In the real world our decision-making is easily hijacked when we make the patient fit our experience base.

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How can you prepare for the tough decisions? What can we learn from others’ experience?

# MY BELLY HURTS

- Day 2: “My belly hurts” → He’s homesick. No PAS
- Day 3: “My belly hurts” → He’s homesick. No PAS
- Day 4: “My belly hurts” → He’s homesick. **Or is he?**



# CONFIRMATION BIAS v. CONFLICTING DATA

- The group was homesick
- Lots of students complained of belly aches, headaches, difficulty sleeping
- This student had some tough challenges at home
- His presentation changed over time
- The student has flank pain
- The student's left testicle was approximately 3x larger than his right



**ALWAYS DO AN  
ASSESSMENT**



# TO IMMOBILIZE OR NOT TO IMMOBILIZE?

## A TALE OF 3 MOIs

### MOI?

Student flipped his kayak and struck his head on a rock under the water then swam to shore.

### MOI?

Student slipped off a log landing on his back, paddled 12 miles to camp, then informed instructors of his fall.

### MOI?

Student tripped and fell, hit her head on a rock, passed FSA.  
Later immobilized when neck became sore



# MECHANISMS FOR SPINAL INJURY (Canadian Spine Rules)

- Falls associated with loss of responsiveness/altered mental status
- High velocity impact (e.g., car/ATV crash, climbing falls, high speed skier/biker crashes)
- Falls from greater than 3 feet (1 meter) landing on the head, back/side or buttocks



# IT'S NOT JUST US

“...any impact of more than 5mph or fall from more than 5ft should be backboarded automatically....”

-Paramedic

“There has been exactly ONE study done asking if our paranoid obsession with spine immobilization is justified by evidence (Hauswald, 1998)...Progressive EMS doctors are questioning the idea that we need to be so freaked out by possible spine injuries AND the idea of board and collar for all on mechanism alone has long been shown to cause more harm than benefit. The paradigm is shifting.”

-MD

# GOOD FIELD IMMOBILIZATION IS TOUGH





**FEAR IS A TRAP**





★  
**INCIDENT**

approximately 1.5 miles

★  
**CAMP**

Firehole Lakes

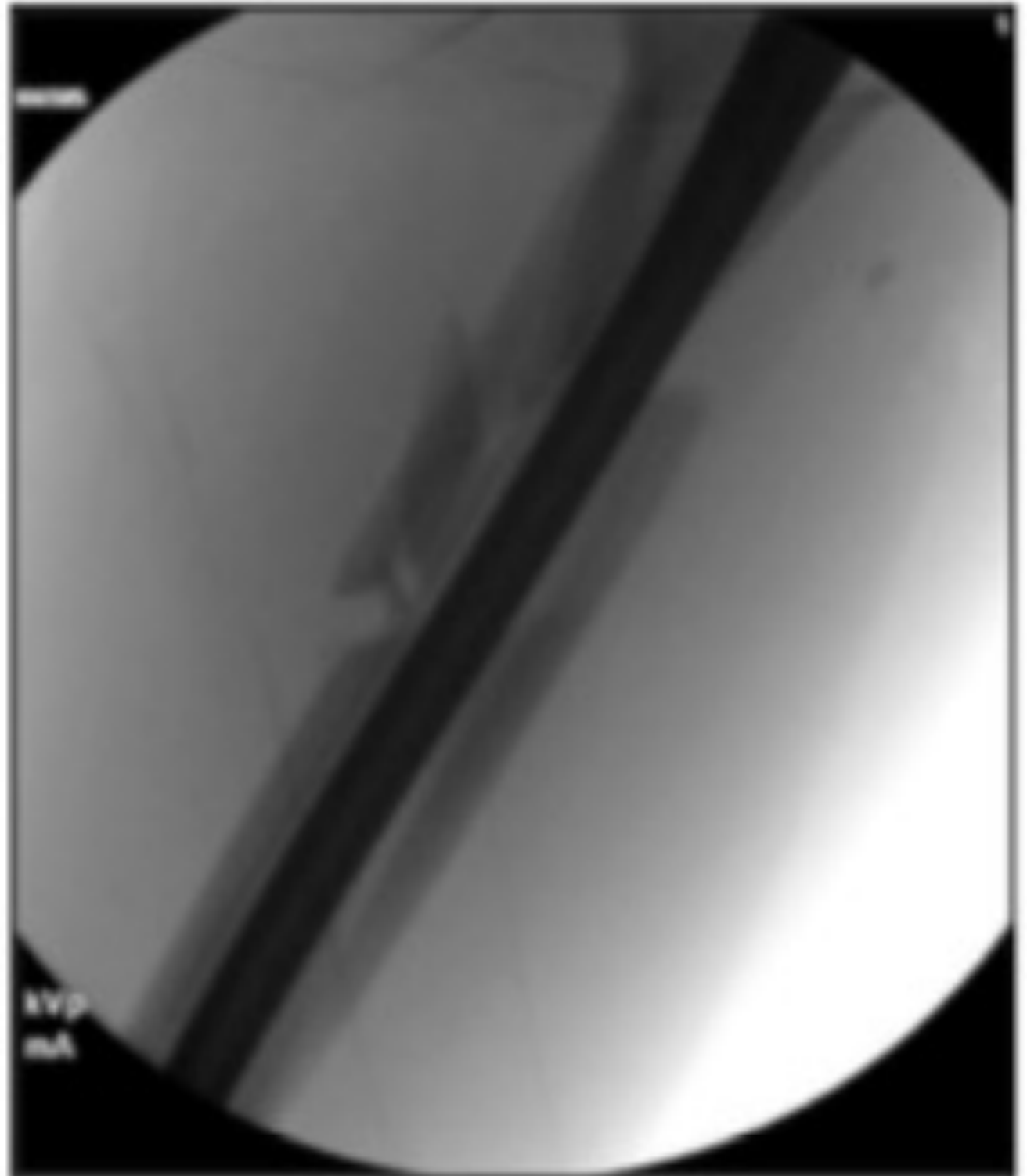
Pass Creek

Pass Creek

Pass Creek



# POST SURGERY





# RISK VERSUS BENEFIT





# YOUR ACTION STEPS



1. Recall a patient you managed. Identify at least one thing that was different between providing care and your training. Share that with your peers.
2. In a remote setting, step away from the patient/scene, review/verbalize your notes, and create physical or temporal distance before making key decisions. Treat the situation like a case study.
3. Add an extended (12 or more hours) scenario into staff training to prepare instructors for long term care responsibilities and stressors.



# QUESTIONS?

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