Demystifying Back Pain

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Andrew Cathers @DrewCathers · Mar 31
@CCInquisitivist echoes @cliffreid while giving critical care bootcamp to @UWEMRP @UWMedFlight @UWEmerMed @FLTDJC

Media
EPIDEMIOLOGY

Audience:

“WHY SHOULD I CARE?”
Fig. 1. Incidence rate of low back pain by 5-year age groups.

Fig. 1. Mean and median prevalence in low back and back pain prevalence studies.
Back Pain Among Paramedics: A Pilot Study

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Keywords: Back Pain; Allied Health Personnel; Musculoskeletal Diseases
CASE
CASE
EVALUATION

Regions of Abdominal Area

- Right hypochondriac region
- Right lumbar region
- Right iliac region
- Epi-gastric region
- Umbilical region
- Hypogastric region
- Left hypochondriac region
- Left lumbar region
- Left iliac region

Marked regions:
- Subcostal
- Interiliac
EVALUATION
MUSCULOSKELETAL

Sciatica Pain
Sagittal MRI images demonstrating large central disc extrusion at L5-S1 (arrows) with compression on the cauda equina.

Source: [Link](#)
NEUROLOGIC
TRAUMATIC

TRAUMA SHEARS

What I think I'll use them for:

Actual use:
TRAUMATIC

Since 2010

- Vehicular: 38%
- Falls: 30.5%
- Violence: 13.5%
- Sports: 9%
- Medical/surgical: 5%
- Other: 4%
TRAUMATIC
VASCULAR
MALIGNANT

Collapsed vertebra

Spinal tumor
INTRA-ABDOMINAL
INFECTIOUS

Osteomyelitis

Discitis
INFECTIOUS

Fat in the epidural space
Epidural venous plexus
Dura mater
Abscess in epidural space
Posterior spinal arteries
Pain from sciatica radiates from the buttock down the leg and can travel as far as the feet and toes.
CASE
Compression Fracture
RUPTURED ABDOMINAL AORTIC ANEURYSM

Normal Anatomy
- Inferior vena cava
- Renal blood vessels
- Right common iliac artery
- Abdominal aorta

Abdominal Aortic Aneurysm
- Kidney

Eventual Condition
- Ruptured abdominal aortic aneurysm with hemorrhage
CASE
Kehr's sign

Pain in the left shoulder associated with splenic rupture.
Normal gallbladder

Inflamed gallbladder

Gallstone

Swollen mucosa

CHOLECYSTITIS

Fever & Leukocytosis

Jaundice

Nausea & Vomiting

Anorexia

Fat Intolerance

Pain
- Right Upper Quad or Right Shoulder
- May Radiate To Back
- Increases with Deep Breath

Feeling of Fullness

Abdominal Distention
CASE
RED FLAGS
Constitutional Symptoms
History of Cancer
Abdominal Pain/Mass
NEURO DEFICITS

CAUDA EQUINA

- Spinal cord
- Cauda equina

Cauda equina
Herniated disc compressing cauda equina

Urinary bladder
BOWEL/BLADDER DYSFUNCTION
BILATERAL SYMPTOMS
Have you ever heard of a spine transplant?
Neither have we.
Take care of the one you have.
Questions?