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**Exam the entire patient**

Document what hurts and what does not

Work – up the patient before rushing to P.T.



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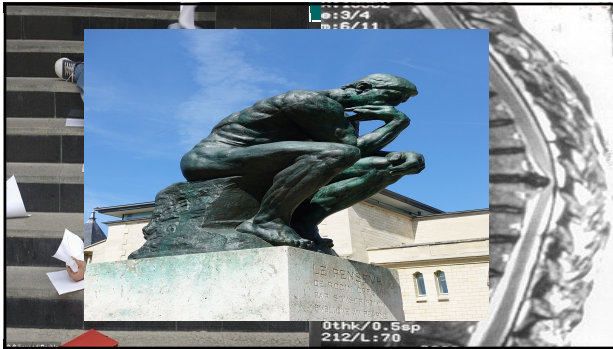
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**DATA**tab

**Pearson Correlation**

**Simply explained**

amount of r  
r < 0.1  
r < 0.3  
r < 0.5  
r > 0.7

low correlation  
medium correlation  
high correlation

A woman with glasses and a blue shirt stands next to a scatter plot showing a positive correlation between two variables. The plot includes a regression line and a shoe icon. The slide also features a bar chart icon and a person icon.

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Be the best you can be.

Rem  
IF IT  
WRC

© PKTS

A cartoon illustration of Charlie Brown from Peanuts, wearing his signature yellow shirt with a black zigzag pattern and black shorts, dribbling a basketball. The background is yellow with a dark green border on the left and right sides.

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A 23 year old twisted on a planted foot 3 days ago, saw urgent care wrapped in ace wrap and told to get crutches, but forgets. Was told a "sprained ankle". Exam diffuse pain, good pules too tender to touch.

Tests?

Diagnosis?

Treatment?

by Unknown Author & Scanned with

A photograph of a person's ankle, showing the area where the injury occurred. The ankle is wrapped in white medical tape.

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**Make it a habit.....**

**Xray ankle and FOOT**



**Don't get fooled: this is OPERATIVE**

- ▶ **SPLINT**
- ▶ **NON WEIGHT AND ELEVATE!**

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**BUT LET'S SAY.....**

**DISTAL ANKLE FRACTURE**



Acts a "sprained ankle"....

- ▶ Look at the ankle mortice.... Is it widened or closed
- ▶ Exam the ankle to see if any instability
- ▶ Splint , elevate and ice
- ▶ **Remember to check for DVT: always ask**
- ▶ **"are you on estrogen for any reason"**

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**Ankle mortice widened**

**But if you see this:**



**Think blood clot or compartment syndrome,**

**Get help.**

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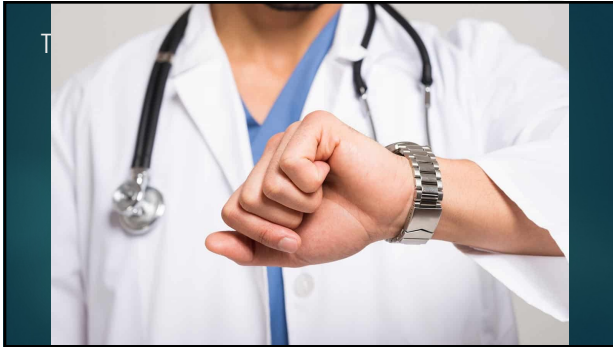
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**What Did We Learn Today?**

- ▶ Think out of the box!
- ▶ Document every conversation the limb.
- ▶ Find the pain generator
- ▶ Treat every soft tissue injury like fracture early on
- ▶ And re-order 7 to 10 days later
- ▶ Non weight bearing / splinting, elevating

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**Wrist: a dilemma**

**Sometimes it appears normal but...**

**Anatomy:**

Distal radius  
Distal ulna  
Distal scaphoid  
Distal trapezium  
Distal trapezoid  
Distal trapezoid base  
Distal trapezoid capitate  
Distal scaphoid

Distal radius  
Distal ulna  
Distal scaphoid  
Distal trapezium  
Distal trapezoid  
Distal trapezoid base  
Distal trapezoid capitate  
Distal scaphoid

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56 year old: comes in fell 3 days ago, has pain, and swelling wrist

- ▶ X-rays negative
- ▶ Mild swelling
- ▶ Rom loss
- ▶ Neuro negative
- ▶ Tender all over

- ▶ What is your diagnosis
- ▶ Where is the pain generator

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Treatment: If you suspect....

- ▶ Fracture: splint, elevate and Ice (SEI), re-xray in 3 to 5 days.
- ▶ Sprain: be more specific, identify the tendon(s), (SEI) for one week, re-examine. Ok to splint or cast a sprain for up to 3 weeks.
- ▶ MRI is symptoms do not improve at 3 to 4 weeks.



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Things to look for



- Carpal Tunnel
- Dequervains
- Guyons Tunnel
- Cubital Tunnel

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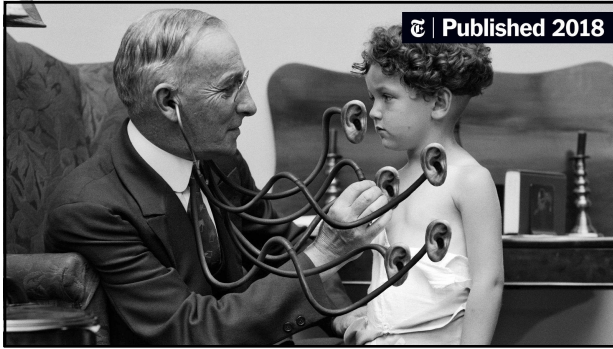
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Pearls



- ▶ Not every one will get better predictably
- ▶ Get you second opinions earlier than later

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The more you see a patient...

The better chance will be made

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### What about Physical Therapy???

Applies to all orthopedics

Make you diagnosis first

Limit their therapy 2 times a week for 3 weeks

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### Treatment options

<b>For carpal tunnel</b>	<b>For Dequervains</b>
▶ Splint at night	▶ Splint at night
▶ Prayer stretch	▶ Avoid repetitive activity
▶ Stop or avoid repetitive	▶ Occupational Hand Therapy
▶ EMG only after 3 months of diagnosis	▶ Injection if you know how
▶ Injection if you know how	

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Bicep muscle (curved)

Joint capsule (curved)

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**Shoulder examination**

- ▶ Impingement
- ▶ PT, injection, avoid overhead
- ▶ Obriens – cuff
- ▶ Hawkins test-labrum
- ▶ Adsons- tos



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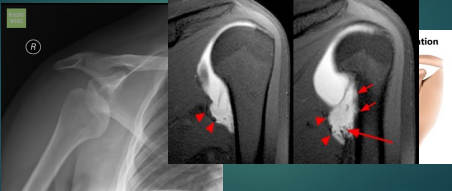
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**Shoulder dislocation vs subluxation**  
**the drag the sag**



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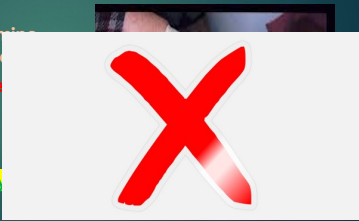
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**Examination Hints**

- ▶ If you did not examine don't write "Normal"
- ▶ Examine the entire extremity
- ▶ Look and record bruising
- ▶ Splint the extremity



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### How do you splint?

**Now do it!**

- ▶ We use a fiberglass, that is wet then dried and apply
- ▶ **NO ACE WRAP!**
- ▶ If you put it on, then you need to take it off... in the future



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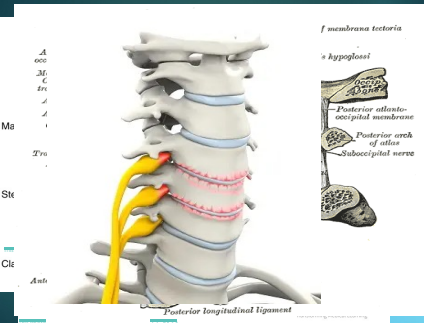

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**Differential:**

- Annular tear disc
- Nerve root compression
- Fracture
- Ligament avulsion
- Muscle strain

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- ▶ Do a complete neurological eval
- ▶ Look for the pain phenotype
- ▶ Intra-articular injections
- ▶ X-Rays first visit
- ▶ Chiropratic – depends
- ▶ PT depends
- ▶ MRI consider earlier than later



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LISTEN TO YOUR PATIENTS

FOLLOW YOUR PATIENTS

EXAMINE HANDS ON!



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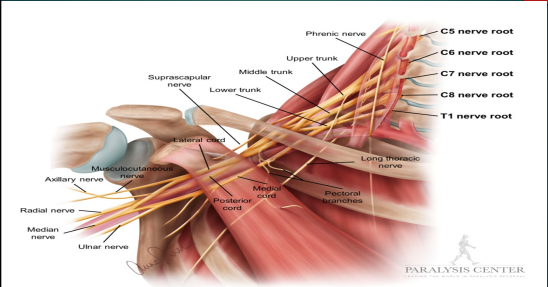
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**Brachial Plexus: a must TO LEARN!**



Phrenic nerve

Suprascapular nerve

Middle trunk

Lower trunk

Lateral cord

Musculocutaneous nerve

Axillary nerve

Radial nerve

Median nerve

Ulnar nerve

Upper trunk

Long thoracic nerve

Pectoral branches

Phrenic nerve

C5 nerve root

C6 nerve root

C7 nerve root

C8 nerve root

T1 nerve root

PARALYSIS CENTER

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**Nerve issues MUST BE assessed**

**SLOWLY but SURELY**



- ▶ Dislocations
- ▶ Fractures
- ▶ Amputations
- ▶ Burns
- ▶ "numbness and tingling"
- ▶ "aching pain"
- ▶ "weakness"
- ▶ Swelling
- ▶ "my hand feels cold"

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**When you examine....**



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**When do I order an MRI**

- ▶ Order only to confirm your diagnosis
- ▶ If patient is not improving over time
- ▶ You suspect a more debilitating problem then presented

**Problems:**

- ▶ An MRI can obfuscate your diagnosis and subsequent treatment
- ▶ An MRI may make you treat an asymptomatic finding
- ▶ Don't be an advocate for an insurance company treat the patient

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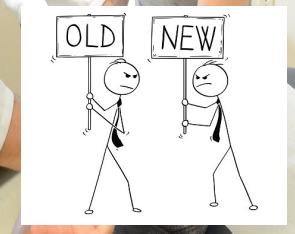
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**Define your terms!**

- ▶ When you speak of radiculopathy
- ▶ Is weakness the same as strength loss?
- ▶ Acute or
- ▶ Chronic?



Manual Muscle Testing - MRC Scale for Muscle Strength  
mskmedicine.com

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**My Hip hurts**

Could be:  
Sacroiliac Joint  
Lower Back  
Gluteal area  
Groin



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**Find the pain generator... point to where it hurts!**

- ▶ Lateral hip: Gluteus Insertion or bursa
- ▶ Anterior hip: Hip joint
- ▶ Pain down the front of leg: Neuropathy or hip joint
- ▶ Back area: sacroiliac
- ▶ Don't forget about UTIs
- ▶ Exam for a Inguinal Hernia ( not common)
- ▶ Check Adductor: Sports Hernia



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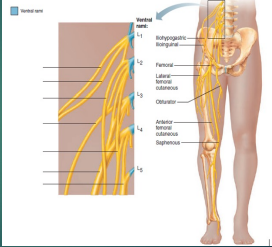
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### Ah yes... need we not forget

- ▶ Know that the Obturator N. Goes down the front
- ▶ Sciatic N. goes down the Back
- ▶ Femoral N. front
- ▶ And.... A disc herniation from L3-L4 or above can cause symptoms
- ▶ A cervical disc can cause weakness



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### Motor Strength

Grade I	1/5
Grade II	
Grade III	3/5
Grade IV	
Grade V	5/5



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### Strength loss with :

- ▶ Knee extension is ...
- ▶ Hip Flexion
- ▶ Dorsiflexion ankle
- ▶ Hip abduction
- ▶ Proprioception
- ▶ Femoral N.
- ▶ L1-L2
- ▶ Sciatic or L5
- ▶ L5
- ▶ ?ankle sprain, neuropathy cerebral

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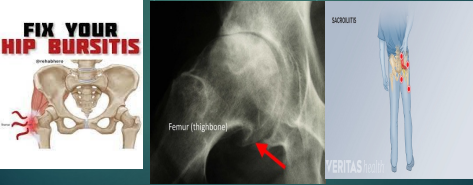
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### So when somebody says:

I woke up and my hip hurts

I feel pain down the front of my leg when I walk

My hip hurts right here!



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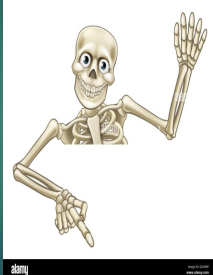
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### Treatment:

- Find the pain generator
- ▶ NSAID
- ▶ PT
- ▶ Injection
- ▶ no wallets in back
- ▶ Get into car differently ( long leg)



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### What is arthritis and how do I treat

If you are an orthopedic surgeon

I WILL FIX THE FRACTURE FIRST... AFTER THAT U CAN CONTINUE UR CPR...

knock!...knock!... knock!...knock!... knock!...knock!...



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### Treat arthritis non-operatively

<b>Preventive</b>	<b>Active</b>
▶ Motion	▶ NSAID
▶ Work out modifications	▶ Injection
▶ Ice, stretch	▶ Bracing
▶ Natural meds	▶ Viscosupplement
	▶ Activity modified

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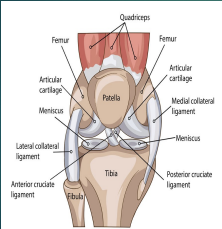
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### Knee Anatomy



- ▶ Meniscus - clicking popping
- ▶ ACL - instability
- ▶ Patellofemoral - up or down
- ▶ Tendon rupture - can't lift leg
- ▶ Subluxation - instability
- ▶ Arthritis - Bakers cyst

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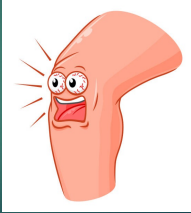
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### Swelling without injury

- ▶ Gout
- ▶ Rheumatoid
- ▶ Infection
- ▶ Injury
- ▶ arthritis



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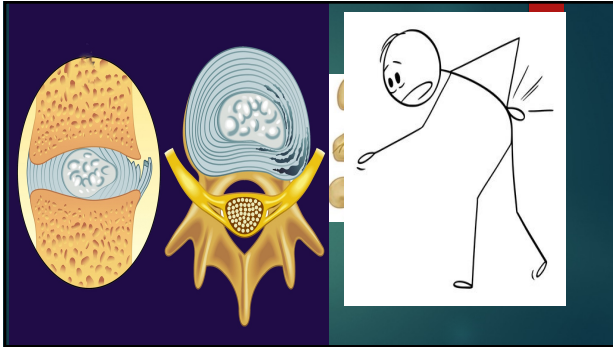
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**Diagnose and Treat the pain generator:**

Leg pain or back pain  
Sitting or standing  
Laying down?  
Past history

**Anatomy of the Lumbar Spin**

 This slide features a green background with white text on the left. On the right, there are two anatomical diagrams of the lumbar spine. The top diagram is a sagittal view showing the vertebrae labeled L1 through L5, with labels for 'Spinal cord', 'Intervertebral disc', and 'Ligamentum flavum'. The bottom diagram is a lateral view showing the vertebrae labeled L1 through L5, with a label for 'Cauda equina'.

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**Check points**

- ▶ Always do a physical exam on the joints above and below
- ▶ Always check lumbar for cervical injuries, and the cervical for lumbar injuries
- ▶ Hear what the patient says, listen too!
- ▶ Do not depend on a scribe to document your findings
- ▶ Find the pain generator
- ▶ Do not order tests unless you think you know the diagnosis
- ▶ Every patient is different, therefore improve your skills everyday

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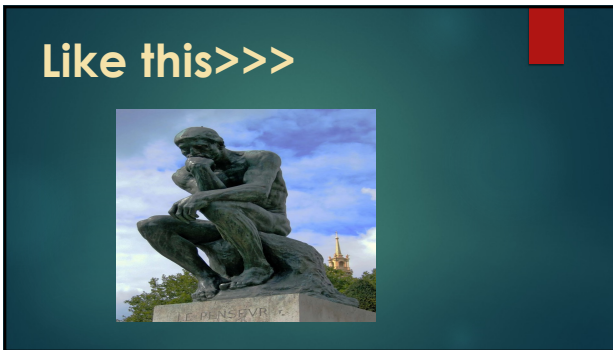
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