An Atypical Presentation of Herpes Zoster

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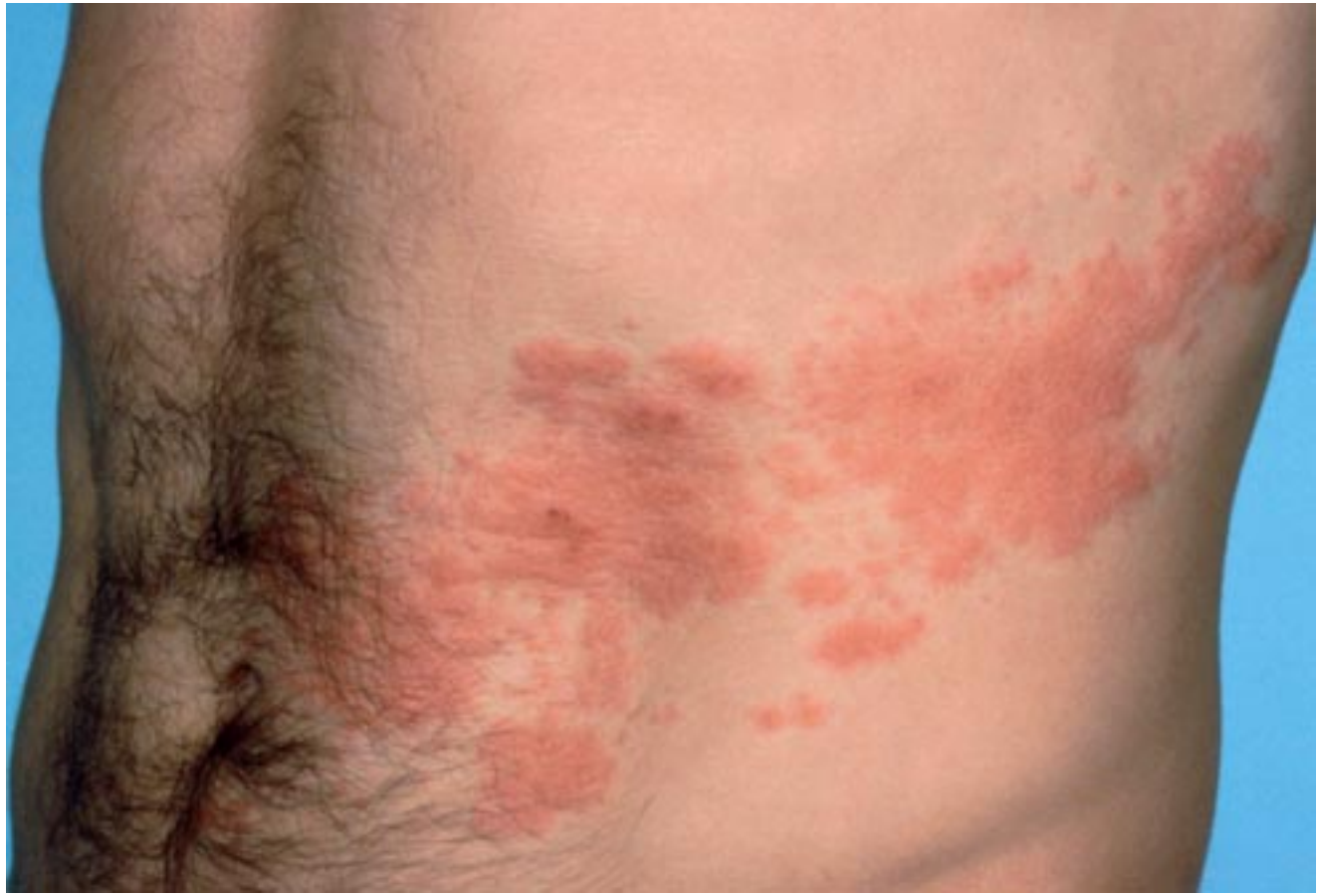
Disclaimers/ Thank you

- I have no conflicts of interest to report
- Thank you to Dr. Pam Hiebert for encouraging me to write this case up and present it and for generally being awesome
- Special thankyou to the patient, who gave permission for me to use his experience as a clinical vignette
- I am a second-year medical student

So what is Herpes Zoster?

- Zoster= “belt”
- Same virus that causes chicken pox (reactivated)
- Double-stranded linear DNA with a capsule
- Member of the Herpes Virus Family

Usual Presentation



Wait, so what is going on at a cellular level?

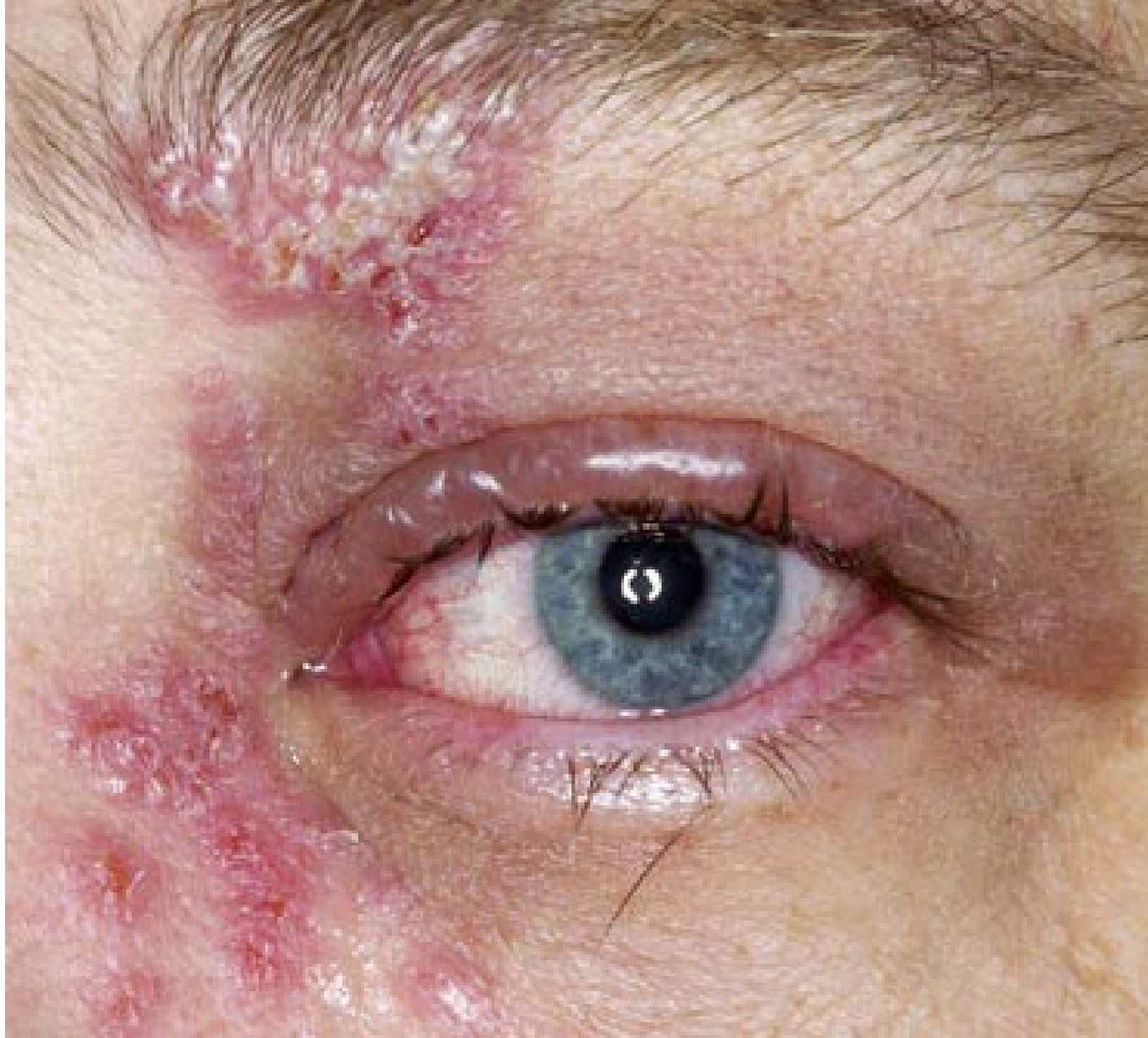
- Retrograde movement of VZV into sensory ganglia sets up the baseline dormant infection
- In infected cells, MHC I receptors are downregulated. Makes cells less vulnerable to adaptive immune system, but more likely to be targets of natural killer cells.
- Intereferon response is also reduced
- Destruction of myelination of sensory nerves

Usual treatment

- Gaunosine analogues are used to stop viral replication
- These include acyclovir, valacyclovir, famciclovir
- Gabapentin can be used for nerve pain
- Steroids

Some Complications

- Post Herpetic Neuralgia- up to 30%
- Herpes Zoster Ophthalmicus
- Ramsey-Hunt syndrome
- Loss of Motor Function
- Transverse Myelitis/ Encephalitis



Also, eating disorders

Zoster sine herpete: Does it exist?

- This is shingles with no rash!
- There is some debate as to whether it exists- maybe rash is internal?
- Best evidence is postmortem from a patient who died from transverse myelitis

Our case: finally!

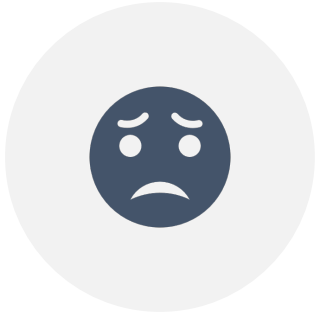
- A 36-yr old male reports to urgent care with a “hernia”.
- Hernia is in inguinal area on l side.
- Patient first noticed it about 24 hours earlier when he sat down to drive and noticed a painful lump.
- Patient has no significant medical history, on no medications
- Never smoked, nondrinker
- No vomiting, no changes in BM
- No recent lifting
- Vitals: BP 125/88 PULSE 49, T 36.8

- Pt is an avid soccer player. He played in college and has continued to play 3-5 times per week.
- We notice the patient is limping. On further questioning, he reports injuring his left thigh last Wednesday night at soccer. He has been icing it but his whole leg has been hurting since Wednesday.
- He does not have reduced range of motion, and he continued to play soccer Friday and Saturday. He hasn't played this week because he is so tired and now with the hernia he can barely walk.

Other ROS:

PAIN IN “HERNIA”- 8/10

PAIN FROM SOCCER INJURY- 4/10



GENERAL FEELING OF MALAISE

FATIGUE- WHEN PRESSED, ADMITS HIS LEG HURTS SO MUCH HE HASN’T BEEN ABLE TO SLEEP.

Examining the “hernia”

- Looked just like a hernia
- Visible from 6 ft away
- No change with cough or valsalva
- Guarding
- Definitely not painless!
- Firm

Now what?

- An ultrasound is ordered
- As patient leans forward, NP notices a few non-coalesced, vesicular lesions on central lower back.
- Patient reports those were not there this morning and are slightly itchy.

AH HA!

"I wish I didn't have to wear clothes, it hurts so bad!"

SO THEN:

- Patient is started on valacyclovir & sent for ultrasound
- One of the lesions is also deroofed and sent for PCR

BUT WAIT!!

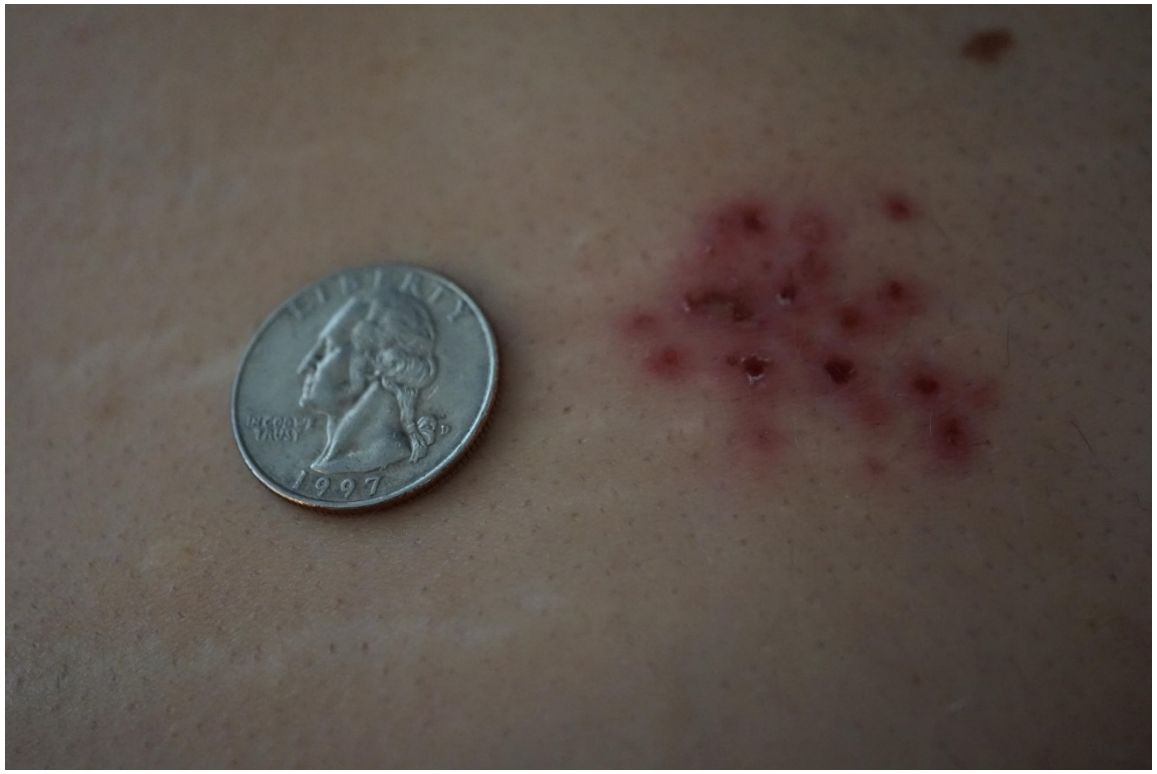
If we know it's shingles, why are we still getting the ultrasound?

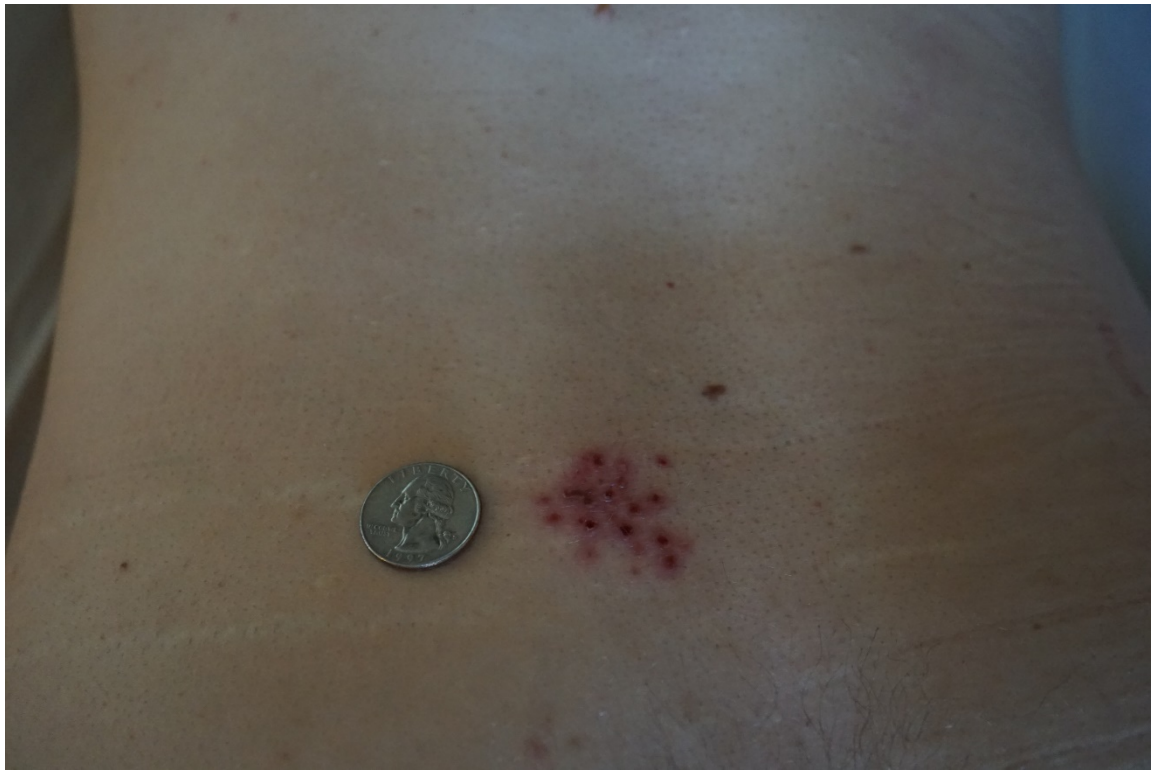
BECAUSE…

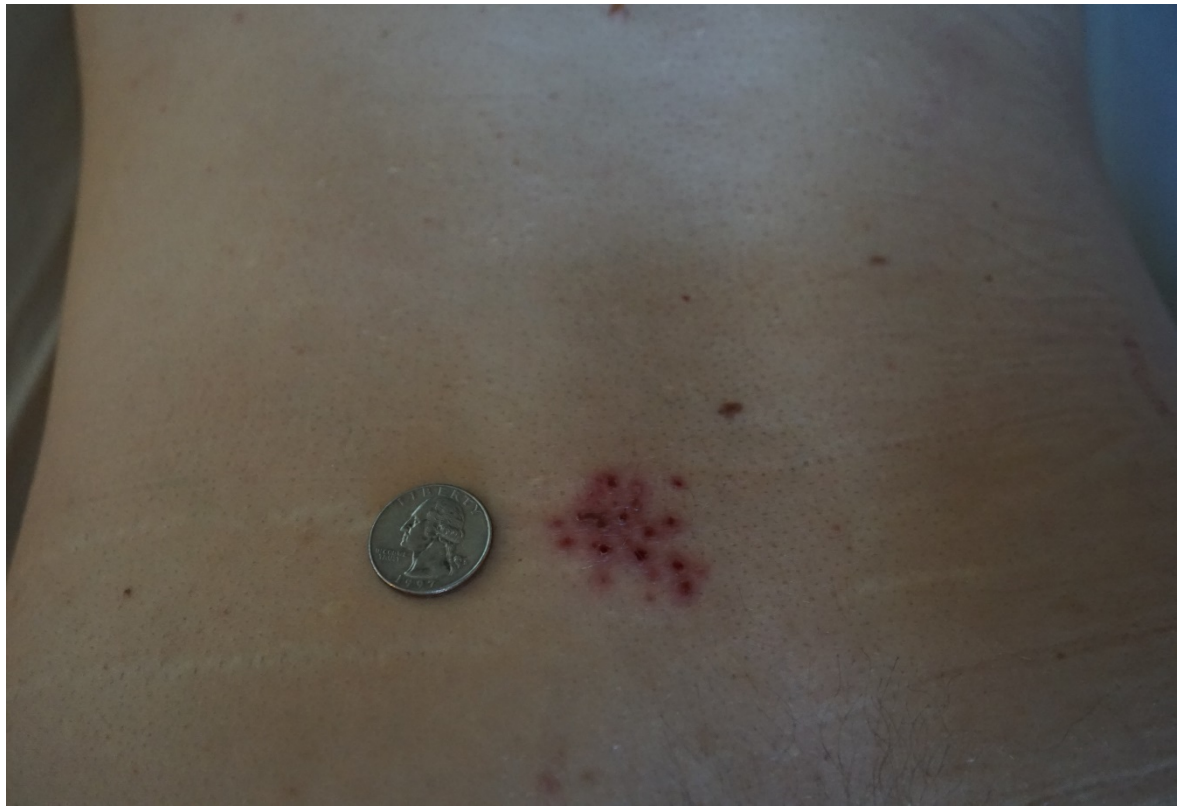
Q: What is the hardest diagnosis to make?

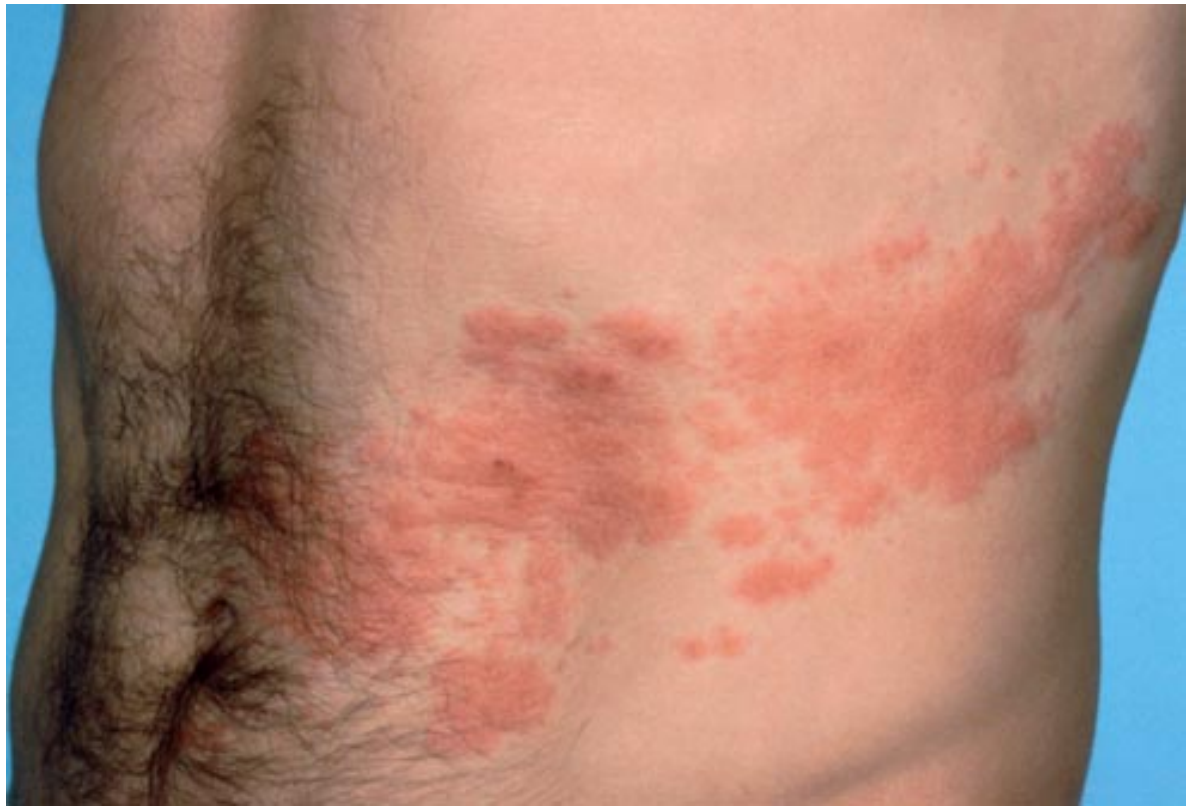
A: The second one!!!

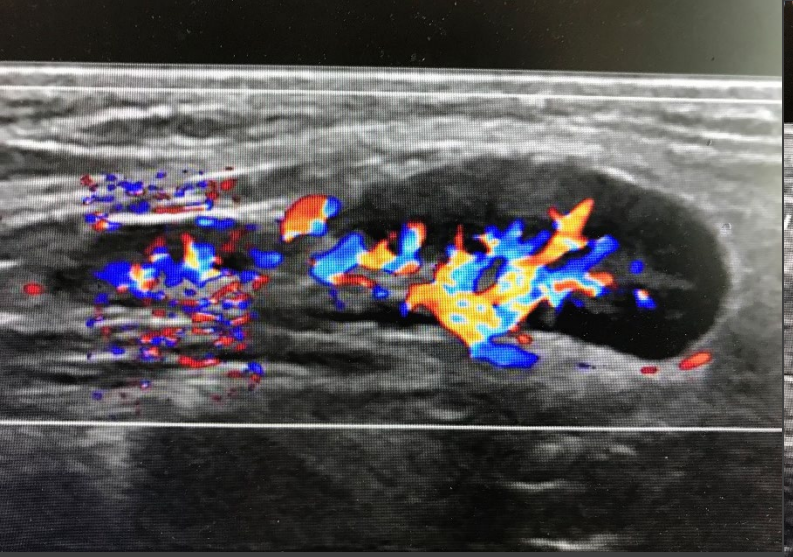
Pictures taken Day 7 of rash

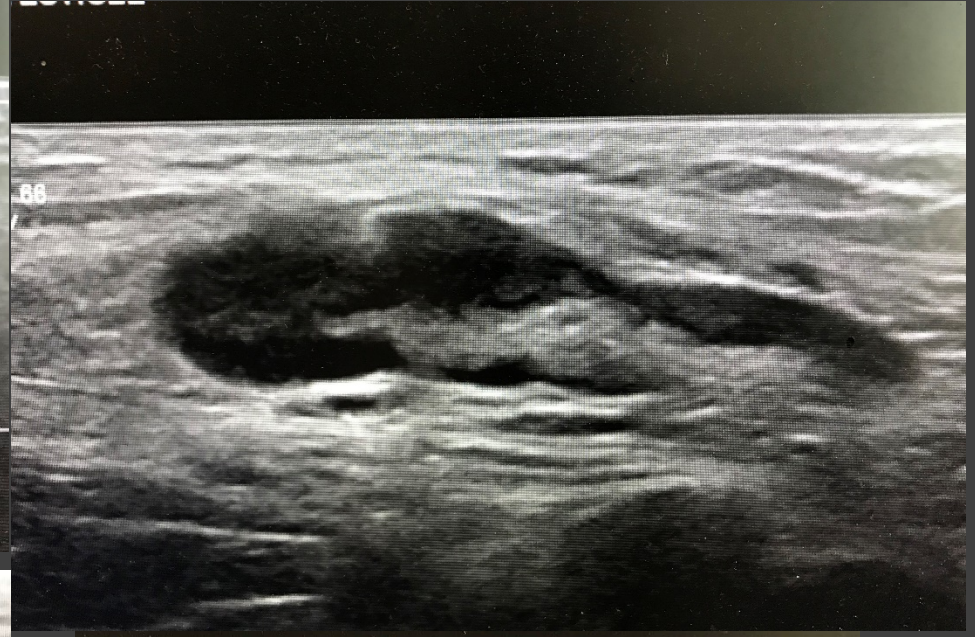


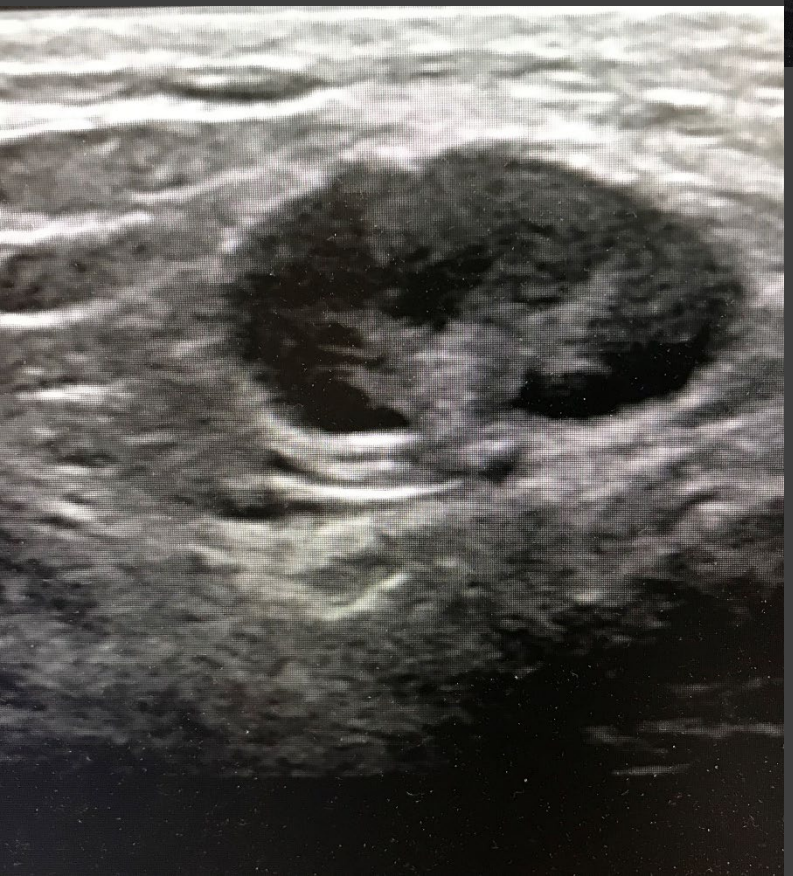


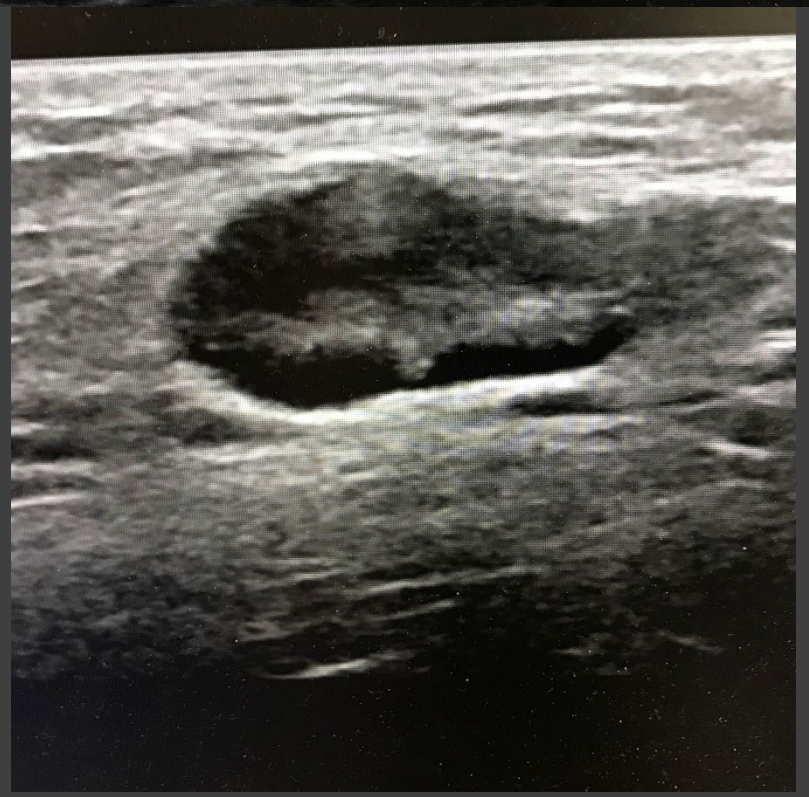












Ultrasound findings: “Prominent left inguinal lymph node measuring 3.7 x 1.9 x 1.0 cm….No evidence of groin hernia.”

Timeline Review

- Day 0-6- prodromal pain (but with attributed cause)
- Day 7- enlarged lymph node appeared
- Day 8- rash, started on antiviral
- Day 9- ultrasound, started on dexamethasone & gabapentin

Pain worsened!

- Entire lower back & left leg
- Pain and numbness for 3 months
- Back lesions are still visible, may scar

3 questions-

- Will this happen again?
- Probably not! Shingles only recurs in about 6% of cases.
- What about complications?
- Our patient is lucky! PHN has been correlated with more extensive rash, and also with late treatment onset. Our patient was able to start treatment within hours of his rash erupting and his rash was spectacularly unimpressive.
- Could the soccer injury have caused this?
- Possibly! In cases of cranial nerve Herpes Zoster, patients were 3.4 x more likely to have sustained a head injury in the past month than general population.

So, what did I learn?

- 1. Look outside the “typical patient”
- 2. Anchoring is so easy!
- 3. Don’t expect the patient to bring up symptoms! Ask! Ask! Ask!

Questions?