

Bob's Pearls

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Gout

- ▶ 54 yo man admitted for severe left knee pain
- ▶ Pain started 5 days previously
- ▶ h/o gout – not documented – but on allopurinol
- ▶ Pain is now preventing sleep
- ▶ No fever
- ▶ Started colchicine the previous day with no improvement

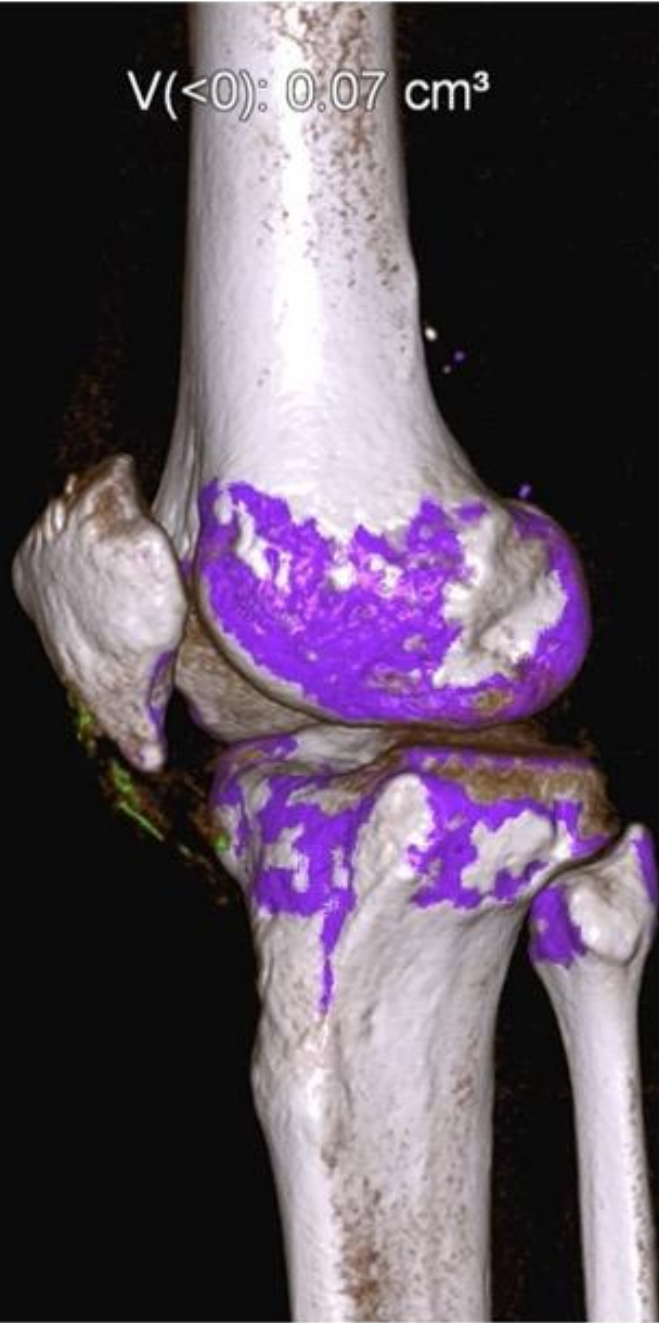
Gout 2

- ▶ Exam – warm, tender knee
- ▶ Arthrocentesis – rheumatology could only get 4cc
- ▶ 170 WBC, no crystals, neg gram stain

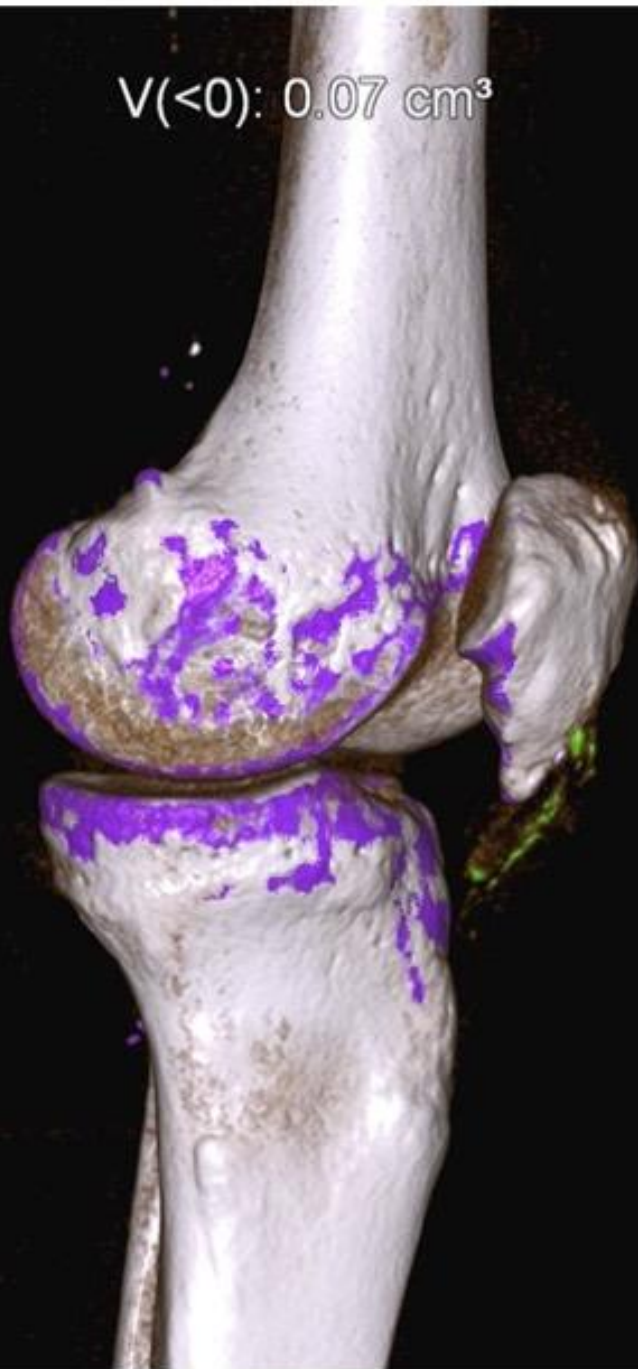
Gout 3

- ▶ Repeat exam by rheumatology – more concerned about pre-patellar pain
- ▶ They order MRI
- ▶ We order dual-energy CT

$V(<0): 0.07 \text{ cm}^3$



$V(<0): 0.07 \text{ cm}^3$



RA

Dual Energy CT

- ▶ Colour-coded, post-processed images are depicted in three planes and three-dimensional rendering.
- ▶ Monosodium urate (MSU) deposition is depicted in green, which is seen around the peroneal tendons of the right foot (cross-hairs).
- ▶ Blue represents cortical bone and purple, trabecular bone.
- ▶ Reference: **Chou H, Chin TY, Peh WC. Dual-energy CT in gout - A review of current concepts and applications. J Med Radiat Sci. 2017 Mar;64(1):41-51. doi: 10.1002/jmrs.223. Epub 2017 Feb 26. PMID: 28238226; PMCID: PMC5355369.**

Gout 4

- ▶ 2 previous cases – spine and wrist
- ▶ Treatment – steroids in this patient but
 - ▶ NSAIDS (naproxen), colchicine, steroids, IL-1 (anakinra)
- ▶ By antagonizing the action of IL-1 receptor, anakinra blocks the action of IL-1 α and IL-1 β and thus prevents the cascade of sterile inflammation in pathological state and in the assembly of the inflammasome.

Gout 5

- ▶ Patient improved dramatically with steroids
- ▶ Uric acid level was 6.2 – we increased his allopurinol from 150 to 300 daily
- ▶ According to rheumatologists we are under treating with urate lowering drugs

Podcast

- ▶ Soon to be released
- ▶ With Angelo Gaffo, MD

Aldosterone

- ▶ Multiple podcasts –
 - ▶ November 2018 **Primary Aldosteronism: How Often Are We Missing It?**
 - ▶ October 2020 **Underdiagnosis of Primary Aldosteronism**
 - ▶ March 2021 **Underrecognition of Aldosteronism in Patients With Resistant Hypertension**

Aldosterone 2

- ▶ Although PA is usually described as a clinical phenotype of severe hypertension and hypokalemia caused by adrenal neoplasia, recent evidence points to another potentially prevalent cause of autonomous aldosterone secretion by abnormal cell clusters within morphologically normal adrenal glands: aldosterone-producing cell clusters

Aldosterone 3

- ▶ In a nationally distributed cohort of veterans with **apparent treatment-resistant hypertension**, **testing for primary aldosteronism was rare** and was associated with higher rates of evidence-based treatment with MRAs and better longitudinal BP control.

Aldosterone 4

- ▶ Resistant hypertension deserves an evaluation for increased aldosterone
- ▶ Dr. Jordy Cohen recommends screening with renin – if low proceed with further testing
- ▶ Mineralocorticoid antagonists are currently recommended as the 4th drug (spironolactone or eplerenone) - some data suggests amiloride if patient cannot tolerate MRA

SGLT2 Multiple Podcasts

- ▶ August 2019 **SGLT2 Inhibitors: The Good, the Bad, and the Ugly**
- ▶ June 2021 **SGLT-2 Revisited: Diabetes Management in Chronic Kidney Disease**
- ▶ December 2021 **SGLT2 Versus GLP1 for Cardiovascular Prevention**

SGLT-2

- ▶ Indications: type 2 DM, heart failure, CKD with proteinuria
- ▶ Currently not recommended for type 1 DM – although research ongoing
- ▶ Side effects: euglycemic DKA, fungal infections, over diuresis when started in heart failure patients

SGLT2

- ▶ Expensive
 - ▶ VA strategy
 - ▶ Bexagliflozin – pros and cons
 - ▶ Get 30 tablets of BRENZAVVY® (bexagliflozin) for just \$59.95, available through Marley Drug Pharmacy (from GoodRx)

Diverticulitis Podcasts

- ▶ January 2019 **Diverticulitis: Myth Versus Evidence**
- ▶ April 2022 **Evidence-Based Care of Patients With Diverticulitis**

Diverticulitis

- ▶ Antibiotics not necessary for simple diverticulitis – therefore these patients deserve a CT scan to help with decision making
- ▶ No evidence of diet impacting diverticulitis – but many patients will want to modify diet

Cystatin C

- ▶ Podcast May 2024 **The Value of Cystatin C Measurement**
- ▶ Cystatin C is made by all nucleated cells, not just muscle. As a result, cystatin C production varies less than creatinine production between individuals, and blood concentrations of cystatin C are fairly similar between individuals who have the same GFR

eGFR creatinine **assumptions**

- ▶ The current formula assumes that all patients of the same gender and age have the same muscle mass
- ▶ This is not a problem with cystatin C

Combining creatinine & cystatin C

- ▶ Better estimate of true GFR
- ▶ Very useful for those > 65 with eGFR in the Stage 3a group
- ▶ Also useful for patients who clearly have an abnormal muscle mass