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Clinical Image

"High Score" in a Patient with Tophaceous Gout

Rech J[1]*, Manger B[1], Schett G[1] and Cavallaro A[2]

[1]Department of Internal Medicine 3 - Rheumatology and Immunology, Friedrich-Alexander University (FAU) Erlangen-Nürnberg and Universitätsklinikum Erlangen, 91054, Erlangen, Germany

[2]Department of Radiology, University Hospital Erlangen, Germany

***Corresponding author:** Juergen Rech, Department of Internal Medicine 3 - Rheumatology and Immunology, Friedrich-Alexander University (FAU) Erlangen-Nürnberg and Universitätsklinikum Erlangen, 91054, Erlangen, Germany

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A 71-year old semi-somnolent patient with 3-vessel khk, chronic heart failure III°, COPD, obesity, diabetes type II, renal insufficiency, several amputated fingers and toes during a 48-year history of chronic gout was referred to our rheumatology clinic due to suspected superinfected wound of ulcerated gouty tophi. At admission the patient was on torasemid 15mg/die, febuxostat 80mg/die, ASS 100mg/die, sitagliptin 50mg/die since years. Laboratory studies were notable for serum uric acid level of 7.7mg per deciliter, C-reactive protein 288.5mg per liter; creatinine clearance rate of 56 ml per minute per 1.73 m^2 of body-surface area. We adapted the dosage of febuxostat to 120mg/die and added kineret for 3 days, followed by canakinumab 150mg s.c. every 12 weeks. Dual energy-CT (Figure 1) of both elbows, hands, chest, knees and feets was performed, revealing a high score of 1014, 4cm^3 tophi volume = 2316, 5mg weight ($C5H_3N_4O_3Na$; molecular weight, 190.09) [1]. To our knowledge this amount of tophi volume, measured by DECT, has never been reported in the literature before. By adding lesinurad 200mg/d to febuxostat 120mg/die and canakinumab 150mg every 12 weeks uric acid level and C-reactive protein decreased to 5.1mg per deciliter and 24mg per liter respectively with reduction of clinical flares over the next 9 months.

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References

1. Kotlyarov M, Hermann KGA, Mews J, Hamm B, Diekhoff T. Development and validation of a quantitative method for estimation of the urate burden in patients with gouty arthritis using dual-energy computed tomography. Eur Radiol. 2020; 30: 404-412.

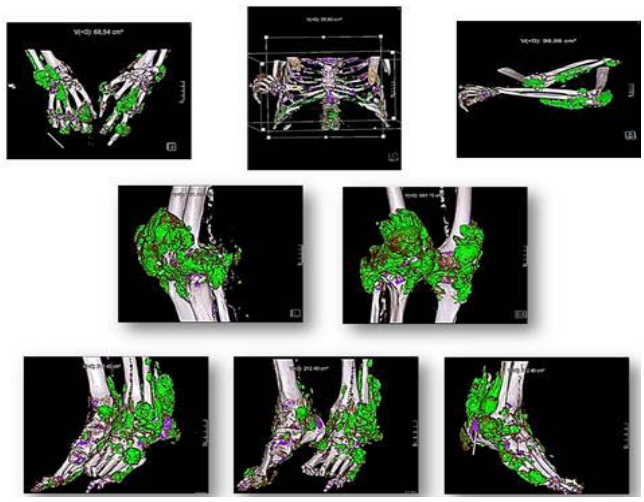

Figure 1: Dual energy-CT of both hands (a), chest (b), elbows (c), knees (d) and feets (e) show MSU deposits (green colour) revealing a high score of 1014, 4cm^3 tophi volume = 2316, 5mg weight ($C5H_3N_4O_3Na$; molecular weight, 190.09).

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