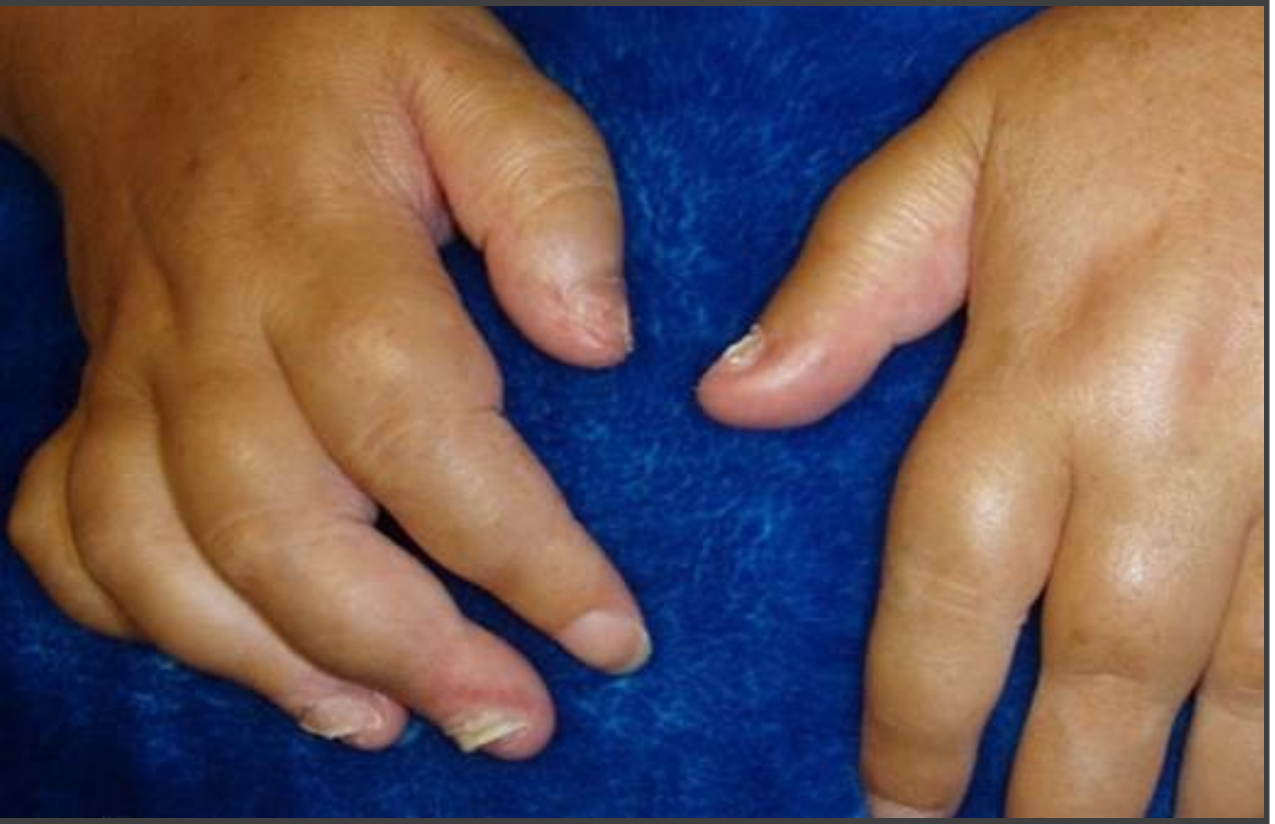
MSR Journal Read

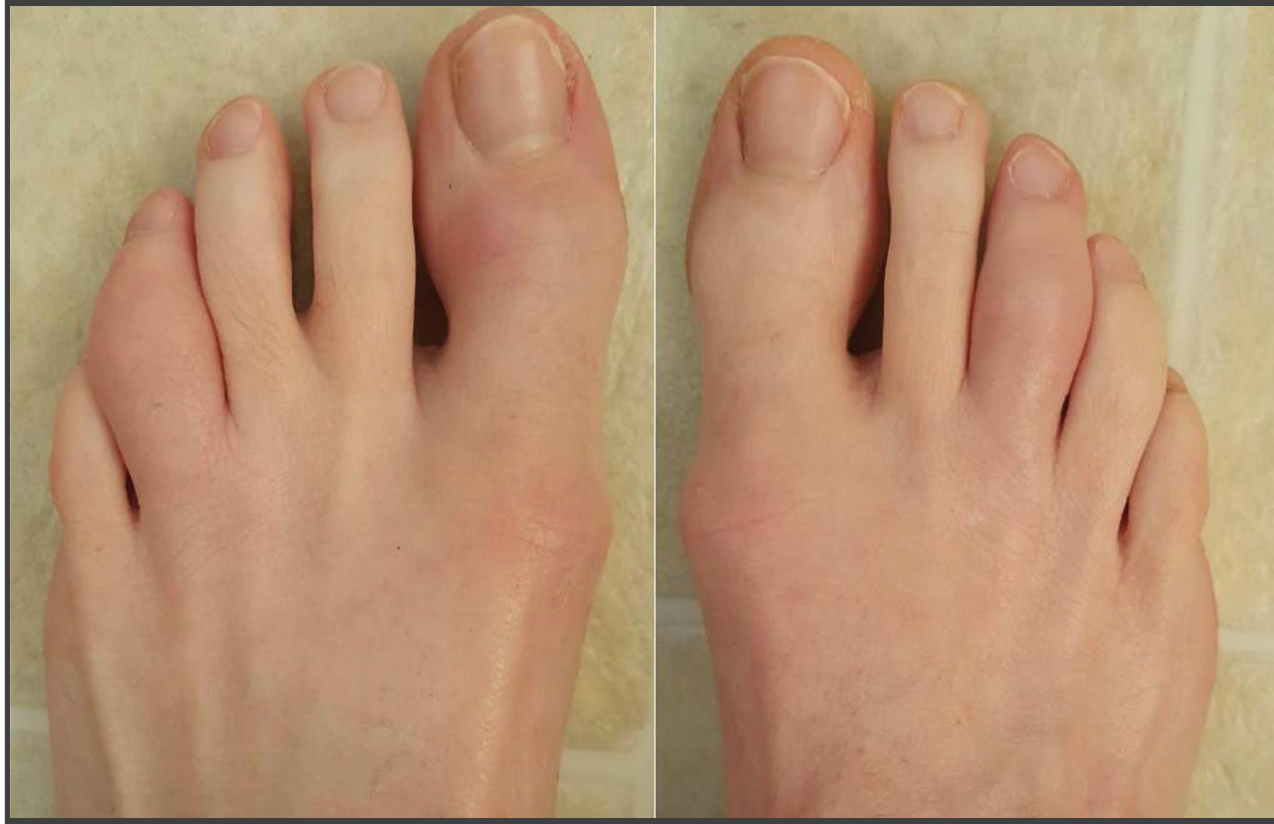
22nd January 2021

CASE PRESENTATION (RHEUMATOLOGY)

“Sausage Digits”

by Shantene Selvadurai (HTJS)





DACTYLITIS

Demographics

MR Z

46 yrs old gentleman

*Allergic to paracetamol, tramal & ponstan

- Married, has 3 children
- Insurance agent
- Smoker 10 sticks/day

First clinic review (July 2016) HTJS

Co-morbids

1) Psoriasis

- diagnosed since 1995 (age 20)
- was under dermato f/up since 2010, then defaulted

+ family history of psoriasis (father)

2) **?Heart disease**

- was under HUKM f/up until 15 years old, then discharged
- remembers having history of prolonged fever and joint pain during childhood

HOPI

- Presented with joint pain and swelling involving bilateral hands and feet
- Gradual onset since 2013; worsening in year 2016
- Early morning stiffness for atleast 1-2 hours

- no lower back pain/stiffness
- no hx of red eyes or altered bowel habits/ bloody diarrhea
- not associated with fever

+ thick scaly psoriatic lesions over body

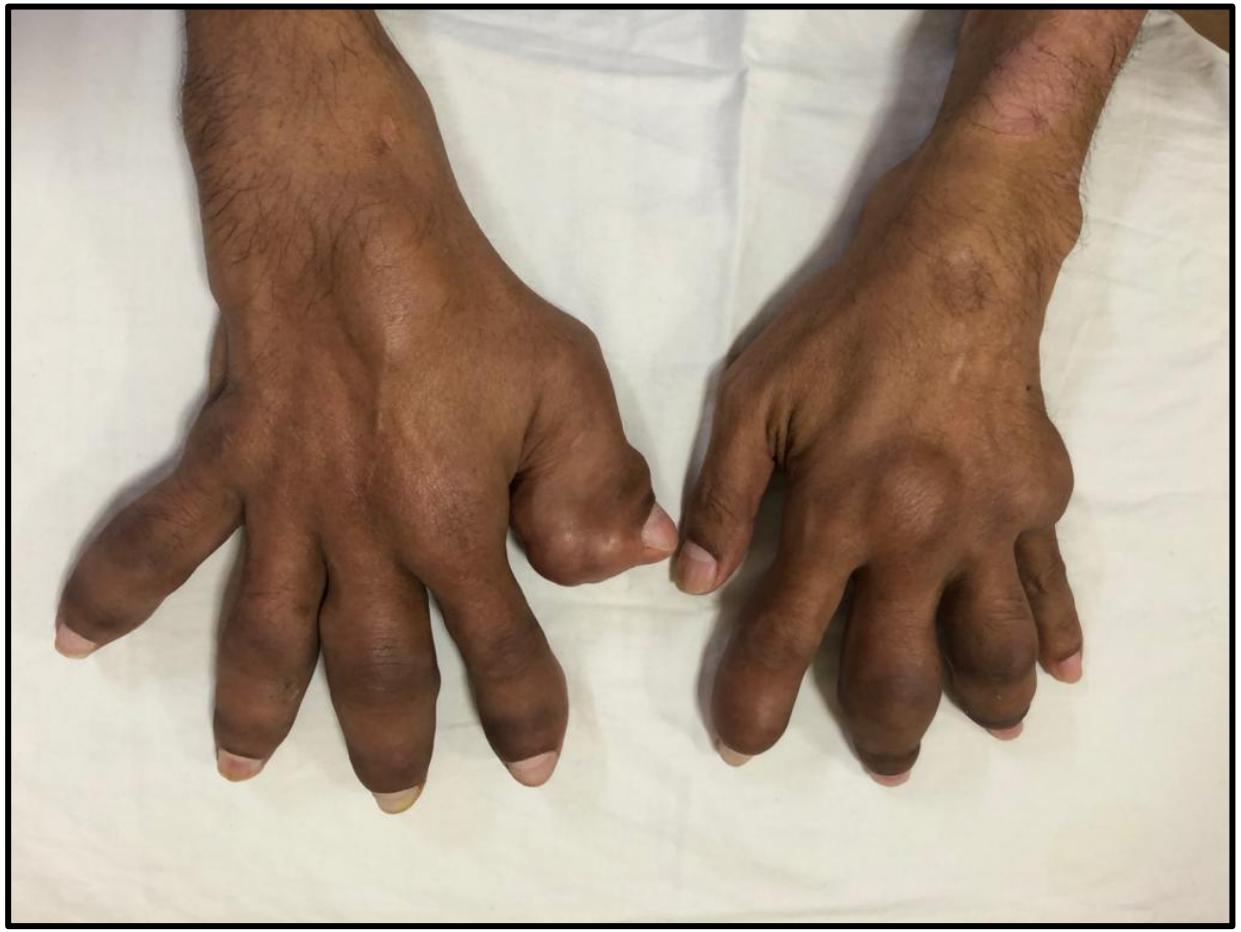
Physical examination

Thick psoriatic plaques seen over scalp, bilateral arms, legs and trunk.
BSA 15-20% + nail changes

TJC : 18
SJC : 6
Dactylitis : 6 digits(2 fingers,4 toes)

CVS: displaced apex beat, EDM grade 3 (predominant) at LSE , PSM at apex

Lungs clear ; Abdomen NAD



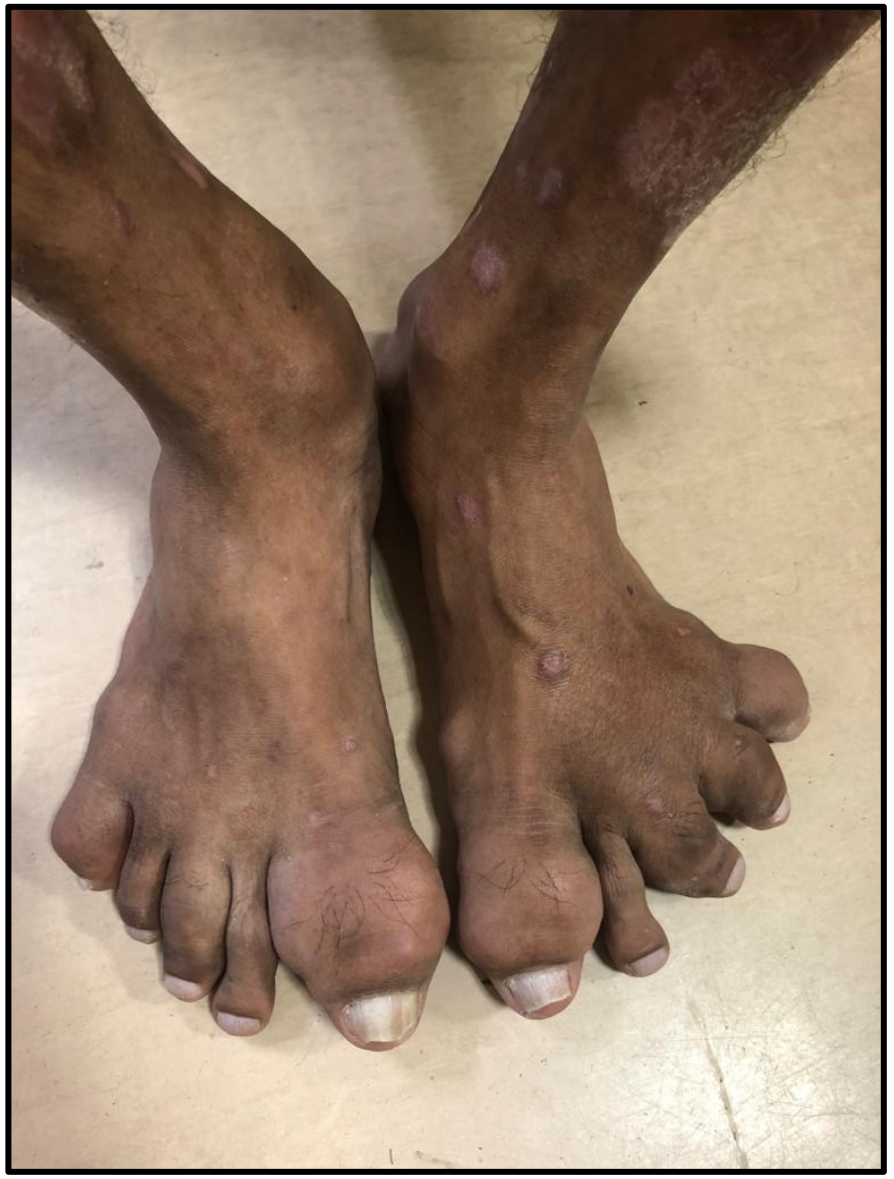
October 2019

Physical examination

No tenderness over SI joint
Modified Schober's +5 cm

Foot ➔
Dactylitis of bilateral big toe, Rt 5th toe & Lt 3rd toe (3)

No Archiles tendon entheseal pain/swelling



October 2019

slido

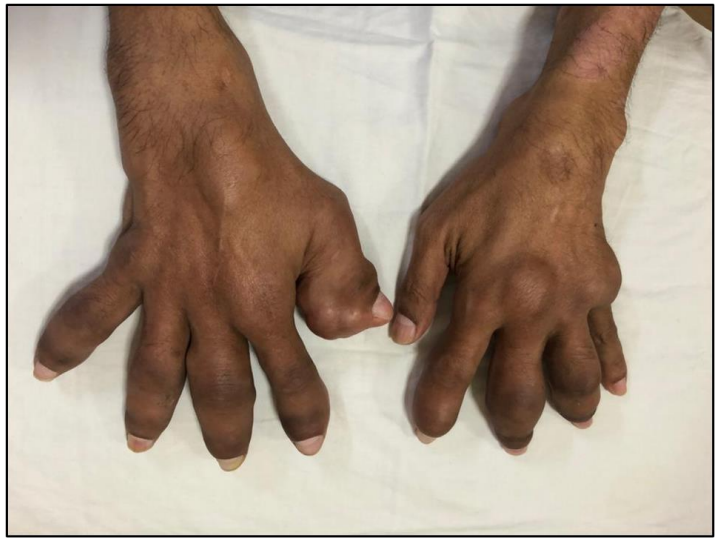
What is your current status :

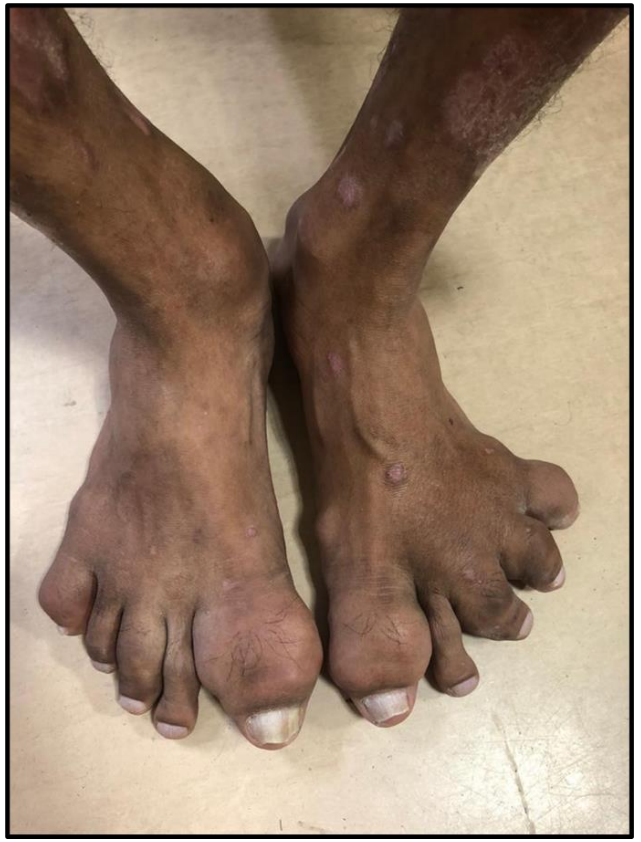
ⓘ Start presenting to display the poll results on this slide.

Poll Question 2

What is the most likely diagnosis of this patient?

a) Psoriatic arthritis
b) Dactylitis
c) Gouty arthritis
d) Infection-related





slido

What is the most likely diagnosis of this patient?

ⓘ Start presenting to display the poll results on this slide.

First clinic review (July 2016)

Lab ix

- Normal FBC,RP and LFT
- Hep B/C/HIV screening : Non-reactive
- ESR 97
- CRP 20.8
- Uric acid 324
- Rheumatoid factor : negative

ECHO = Dilated LA/LV, Moderate MS & AR, EF 52%

Impression

- Psoriatic arthritis in underlying Psoriasis
- Chronic Rheumatic Heart Disease

- Start T.MTX 7.5 mg weekly ; to escalate to 12.5 mg /week
- Meloxicam 7.5 mg PRN + Folic acid
- Refer skin and TCA combined clinic 3/12

2nd clinic visit (Sept 2016)

Joint pain still persistent, on MTX 12.5 mg weekly

o/e : Multiple tophi over Rt Thumb, Lt 2nd ,3rd finger

Noted pt's hand x-ray : punched- out lesions over 3rd left DIP and Rt 1st IP.

Uric acid 382

Impression : **Chronic tophaceous gout**

<u>Plan</u>

- Start Allopurinol 100 mg OD + colchicine 0.5 mg OD

Clinic review (Dec 2016)

- Developed side effects : palpitations + mild itchiness after 1/12 of taking Allopurinol 200 mg
- No rashes/ulcers to suggest SJS

→24 hr HOLTER normal, TFT normal

During clinic review in Dec 2016

- re-challenged with Allopurinol 50 mg OD (pt agreed)
- To apply for febuxostat under KPK
- Increase MTX to 15 mg /weekly

Clinic review (Feb 2017)

- Still having epigastric pain ; followed by palpitations (on Allopurinol 100 mg OD)
- No rashes
- Noted ALT raised from 20 to 72

Plan

To reduce MTX to 10 mg weekly

ODGS appt

To repeat LFT in 1/12

Cont dermato plan – topical steroids & phototherapy

Progress.. (Feb – Dec 2017)

- OGDS done : reflux esophagitis + antral gastritis
- ALT normalised to 9
- SUA 437

- Received approval for Febuxostat in Oct 2017

- Started on Febuxostat 40 mg OD
- Ural sachet tds, Vit C 500 mg daily
- Pantoprazole 40 mg OD, MTX 10 mg /week

Dec 2017: joint pain better, a few resolved tophi (dorsum of hand) SUA 389

Progress..

Dec 2017

- Uric acid trend 359 → 394 → 389 (TARGET <300)
- Dose of Febuxostat increased to 80 mg OD
- Uric acid 344

March 2018

- MTX was stopped due to transaminitis ALT 232 (? Combination with febuxostat)

July 2018

- Worsening joint pain (SUA 344) CRP 22; ESR 41
- Finger swelling similar

- Probenacid 250 mg BD added

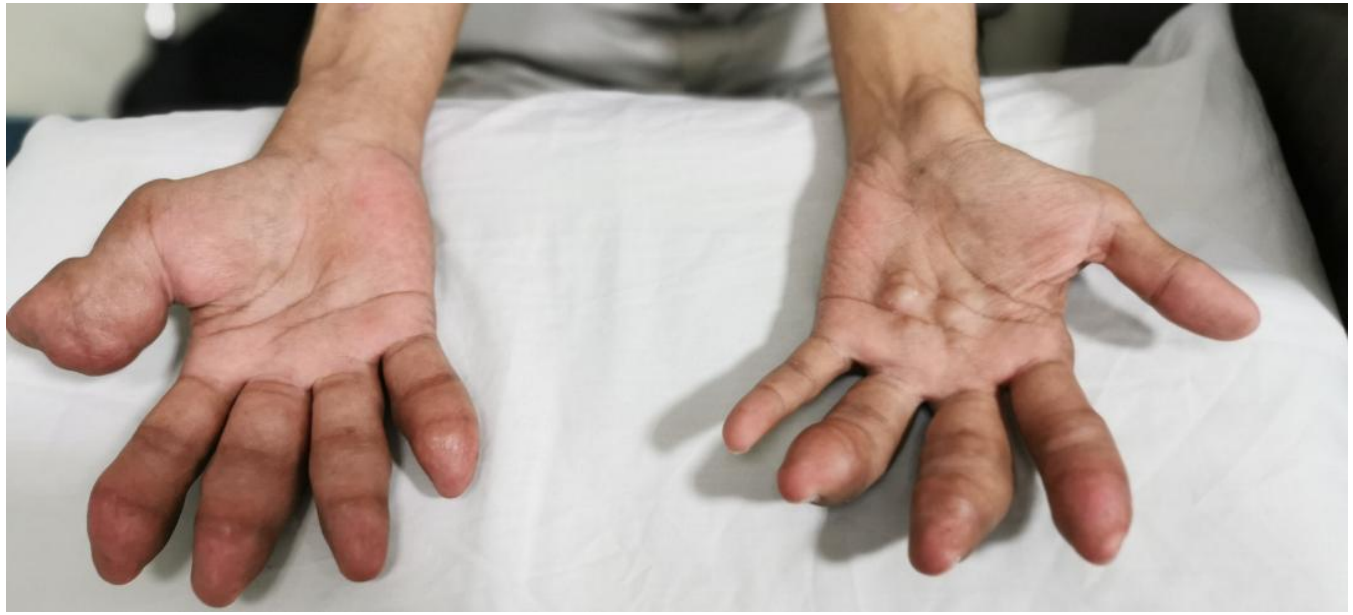
→Uric acid reduced further 235….

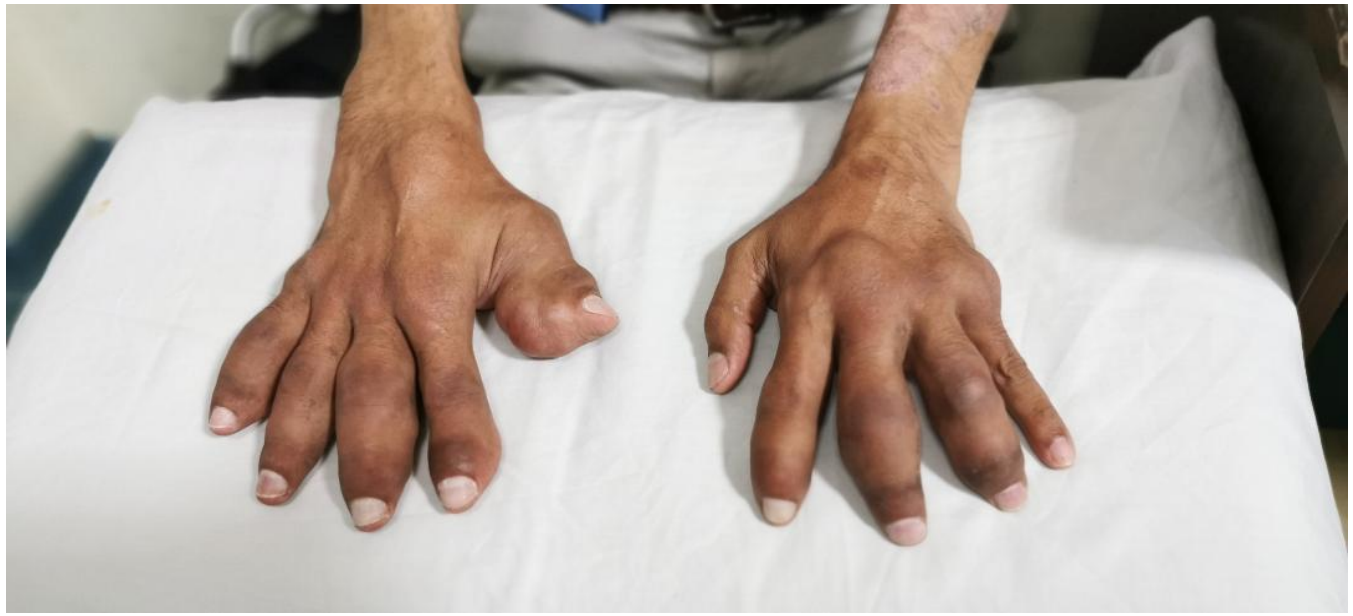
→Pain reduced ; hence treatment continued

However…. Oct 2019

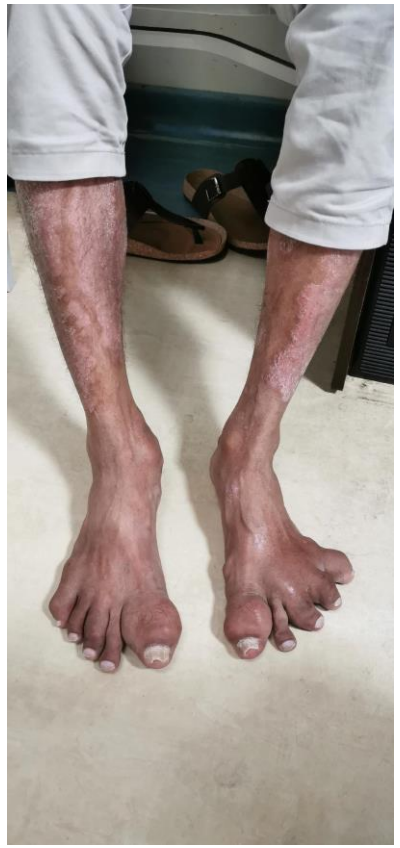
- Patient’s digital swelling was worsening, joint pain VAS 4/10, EMS 3 hrs
- Almost all fingers and toes were swollen
- Active psoriatic plaques
- CRP 15.7; ESR 42; SUA 257
- Any thoughts on why?..

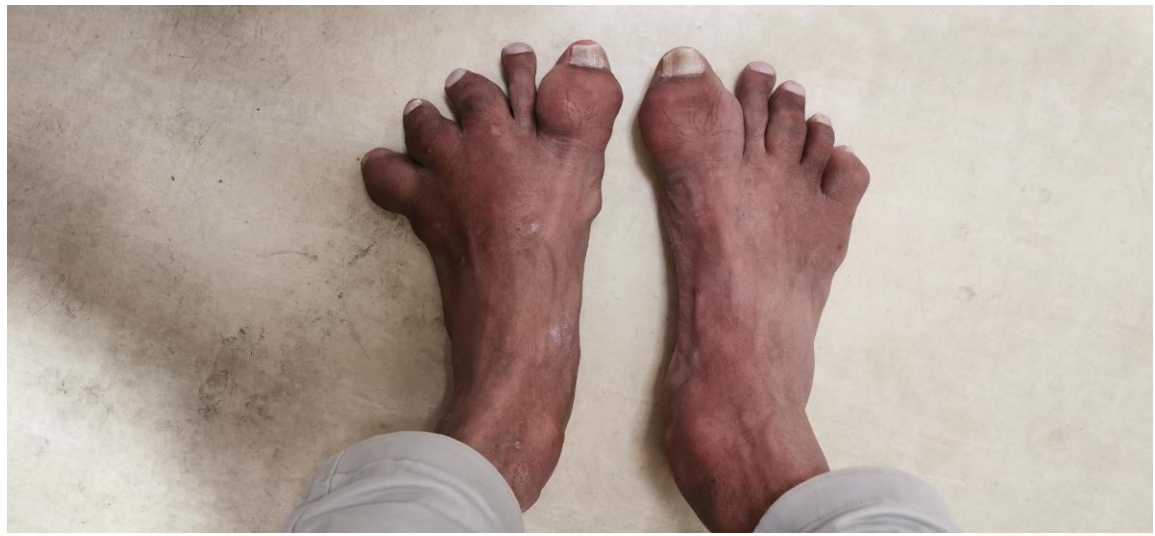
Sausage digits...



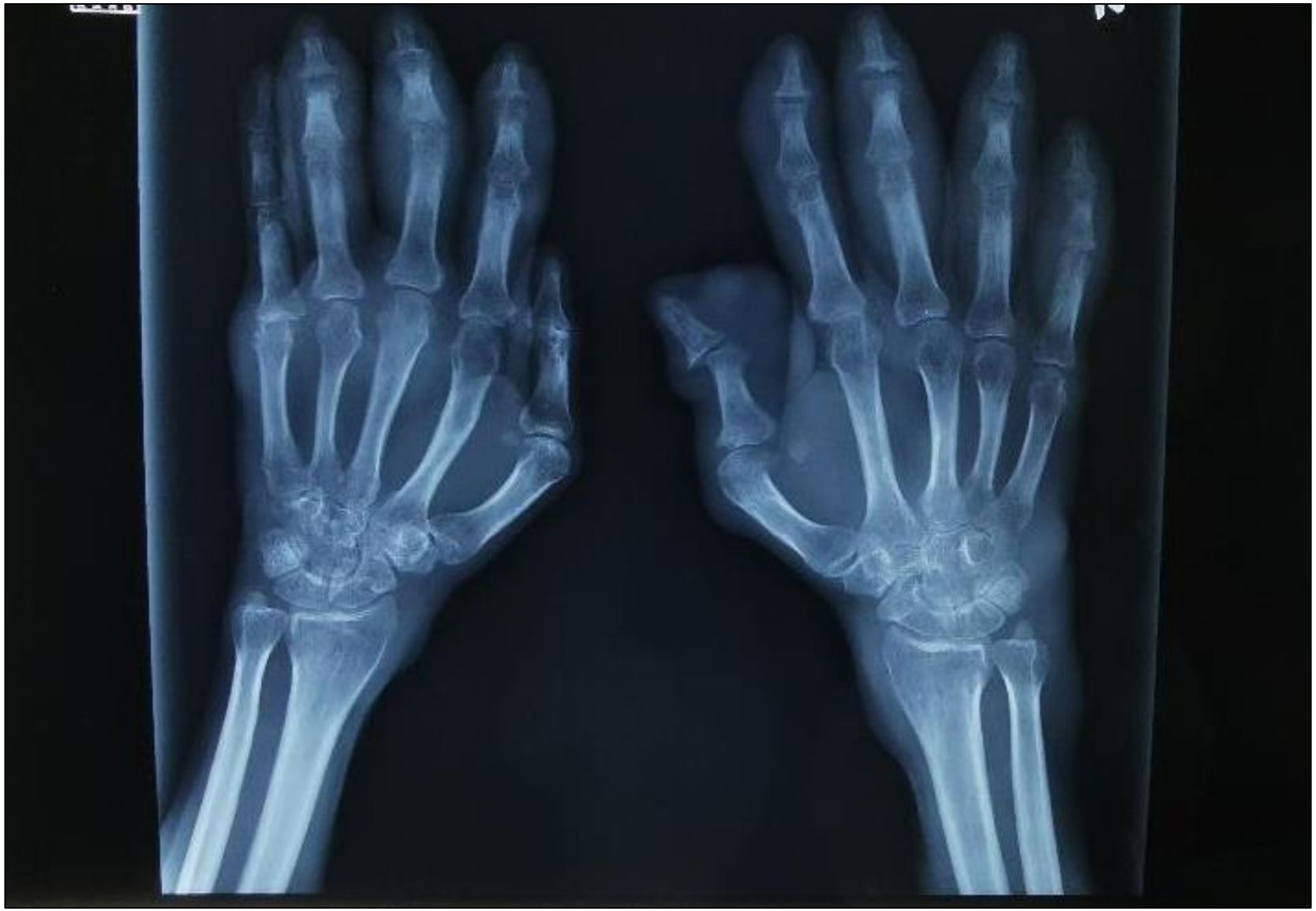


Sausage digits….

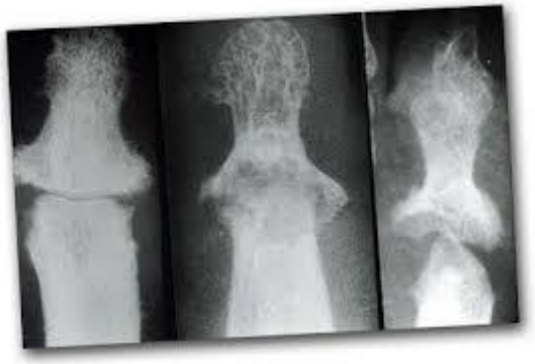




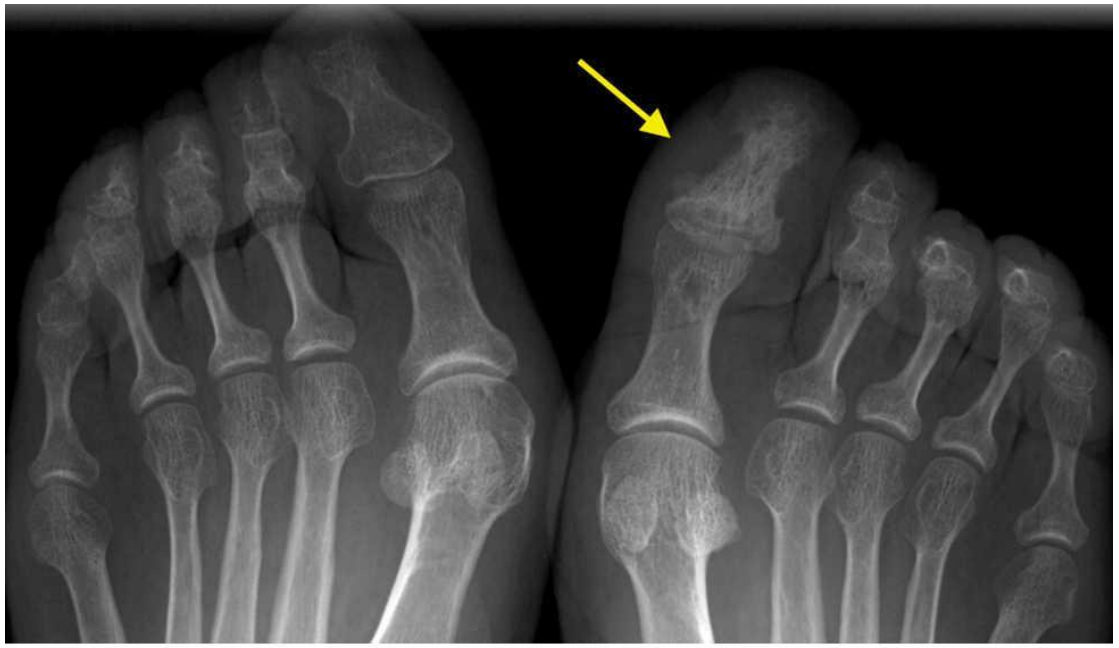
Hand X-Ray (2019)



PsA imaging features

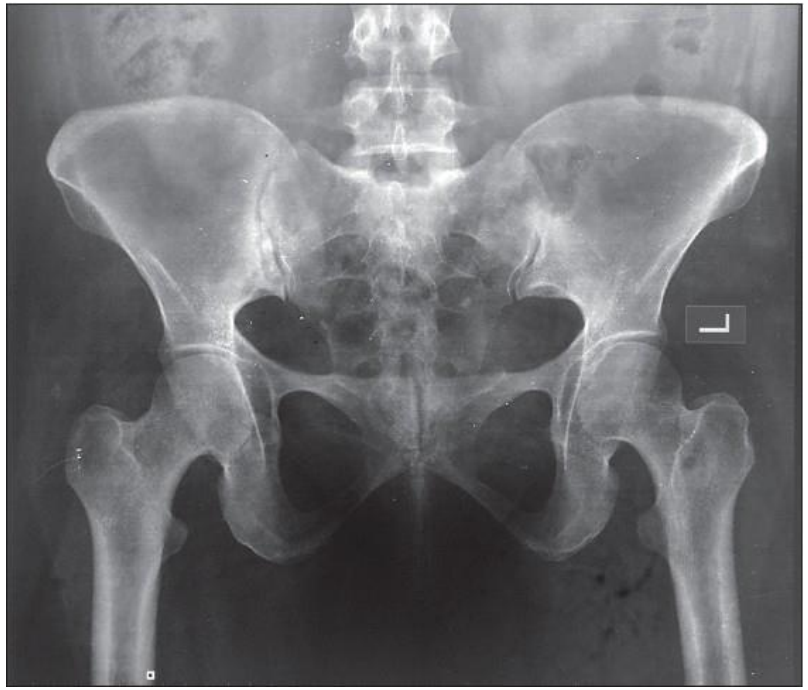


Pencil in cup

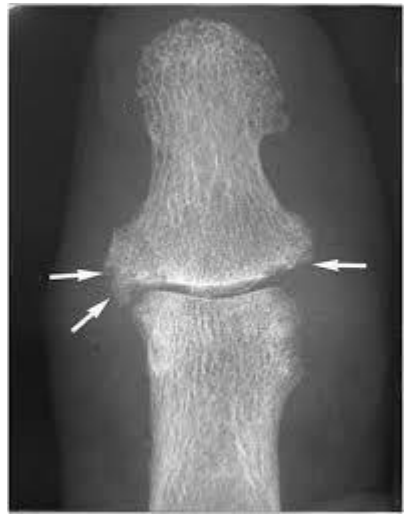


Reumatol Clin. 2017;13:113–4

Ivory Phalanx

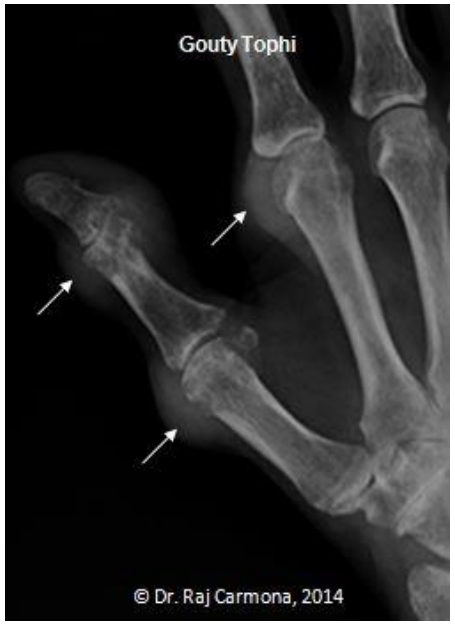


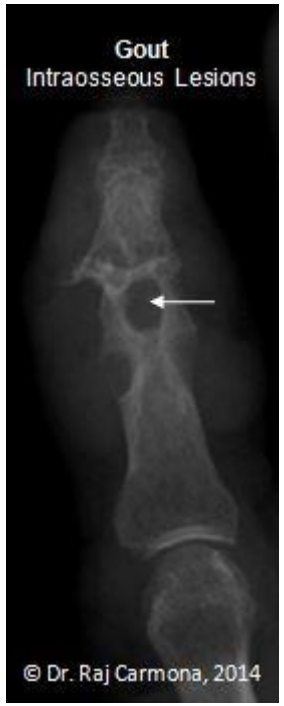
Sacroilitis

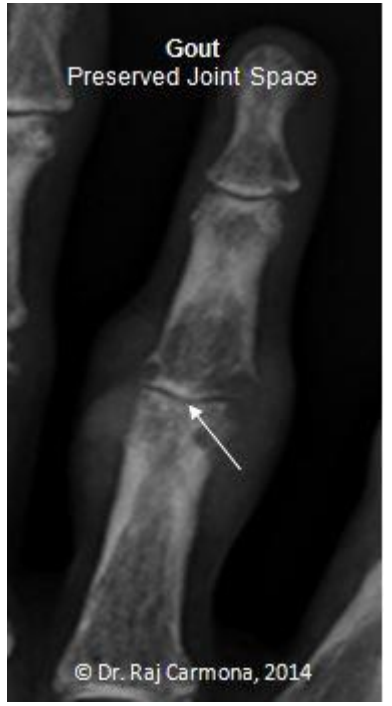


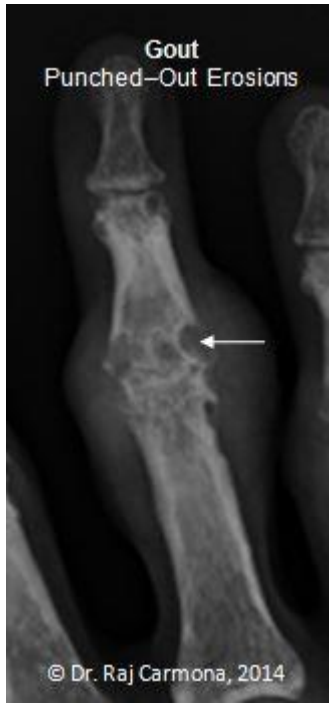
Bony erosion and spur

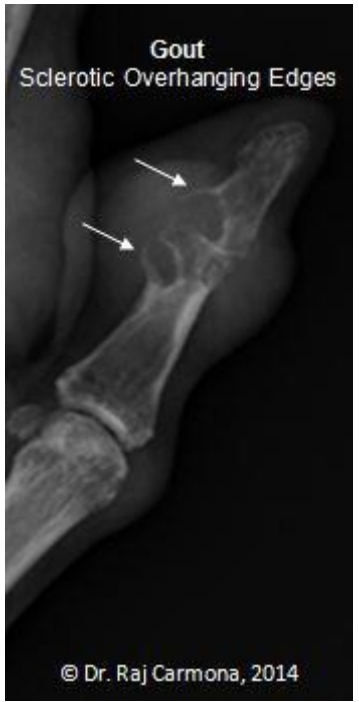
Gouty arthritis imaging features

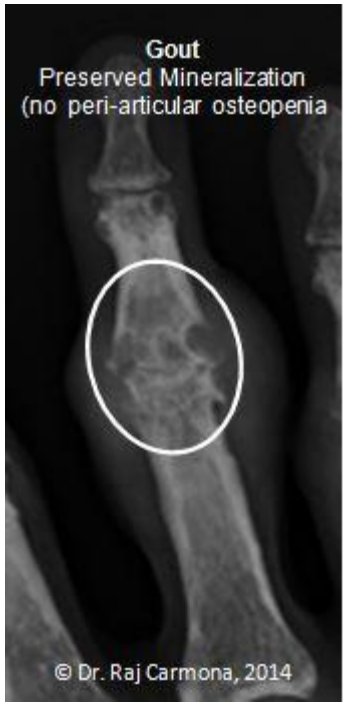


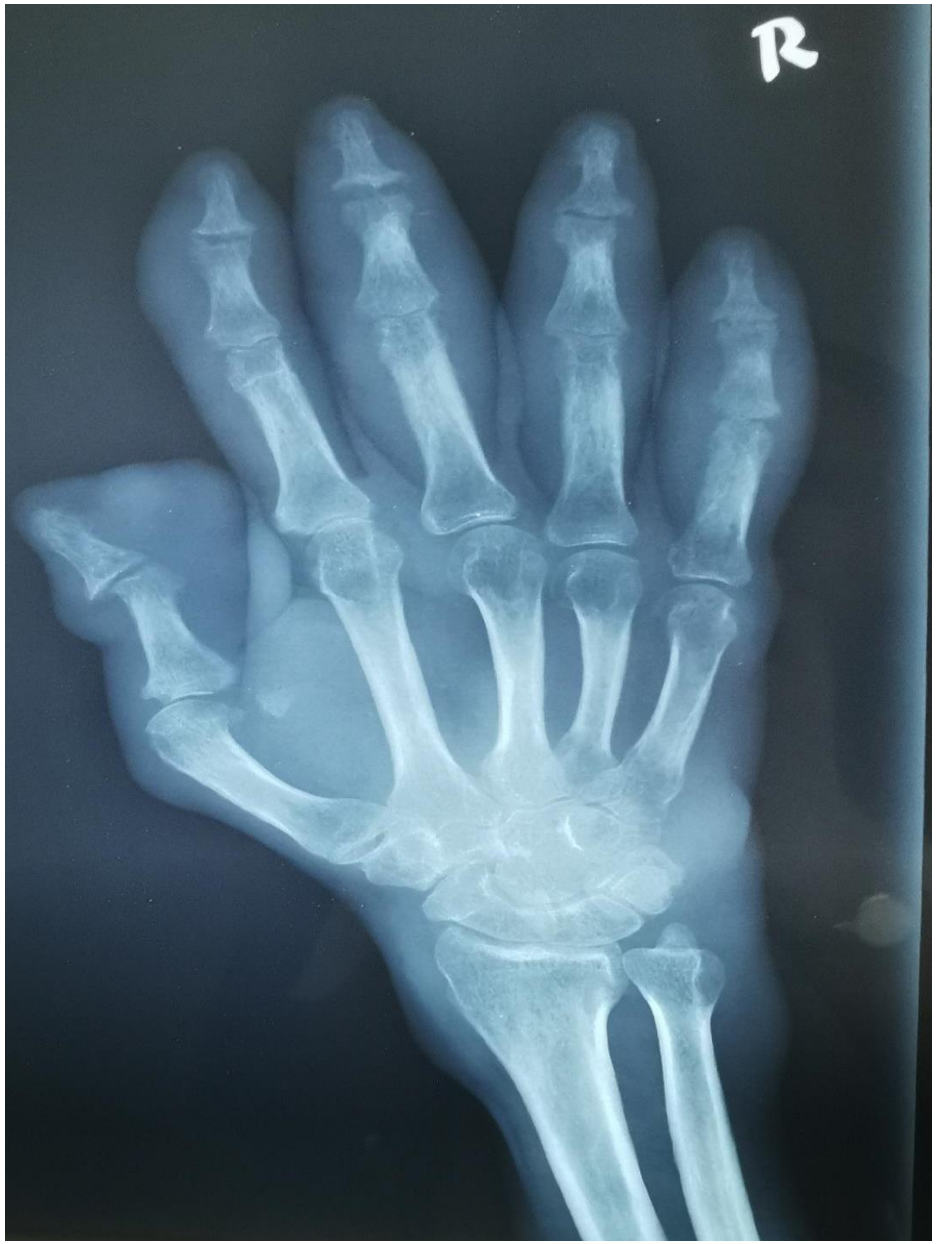








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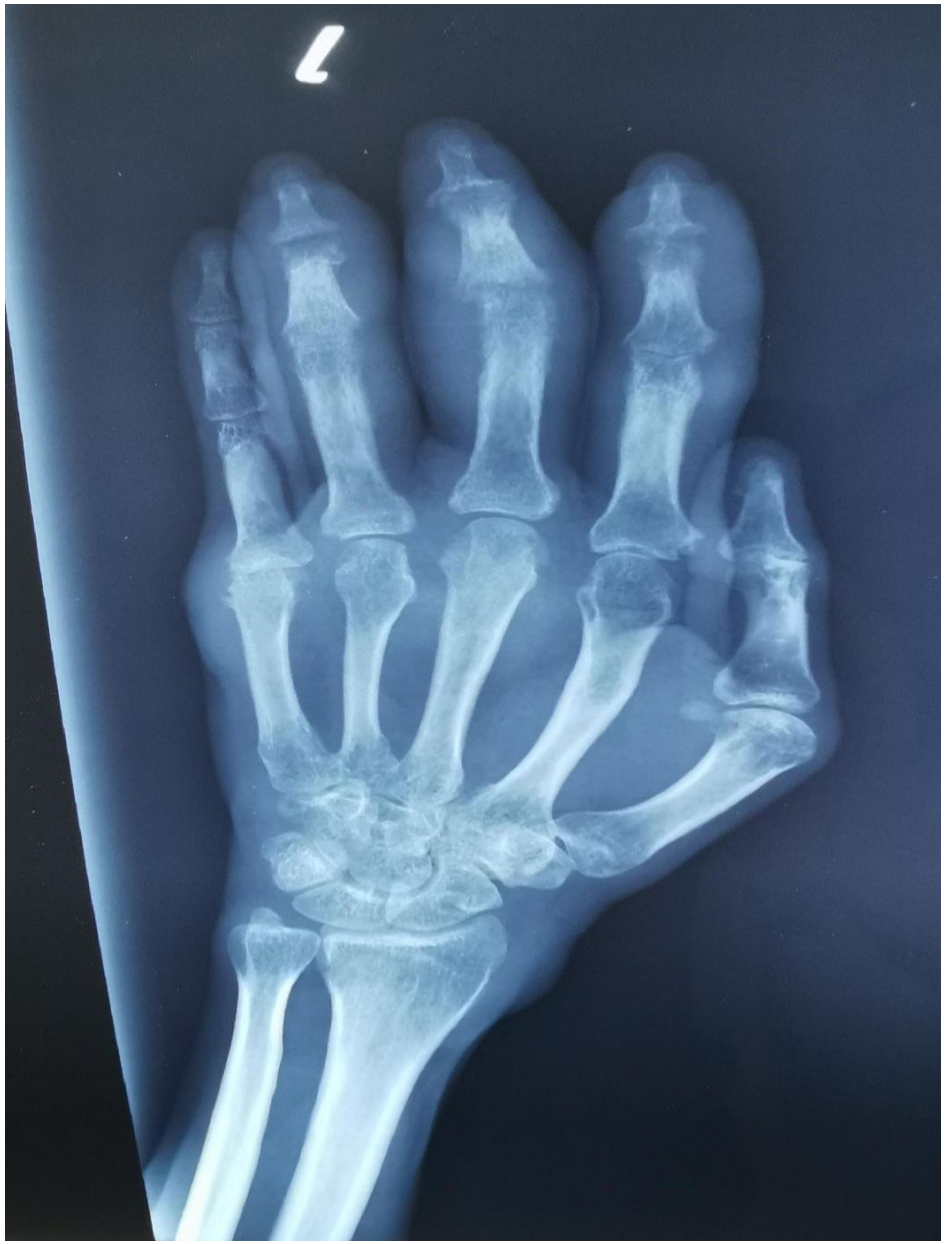
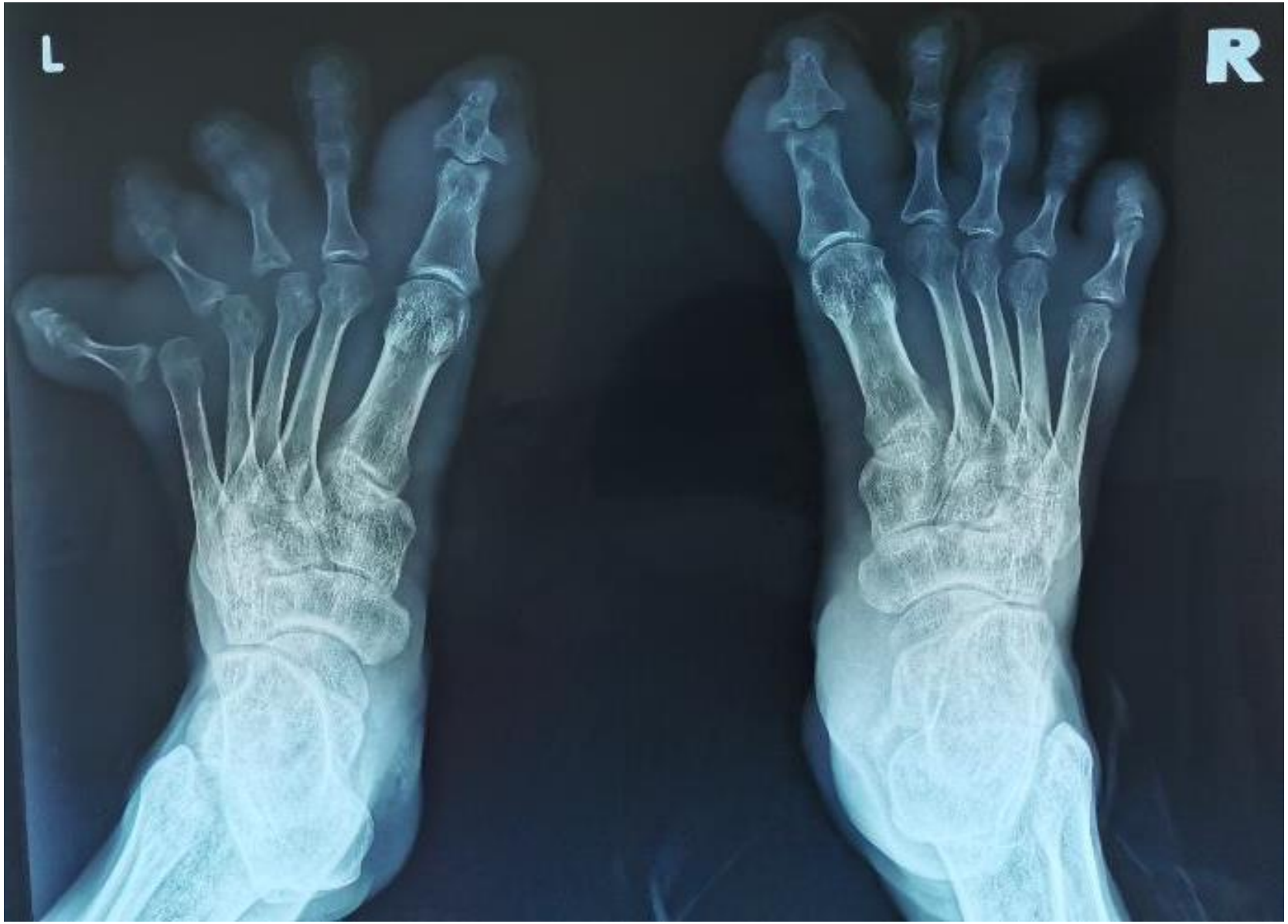

L

X-Ray foot



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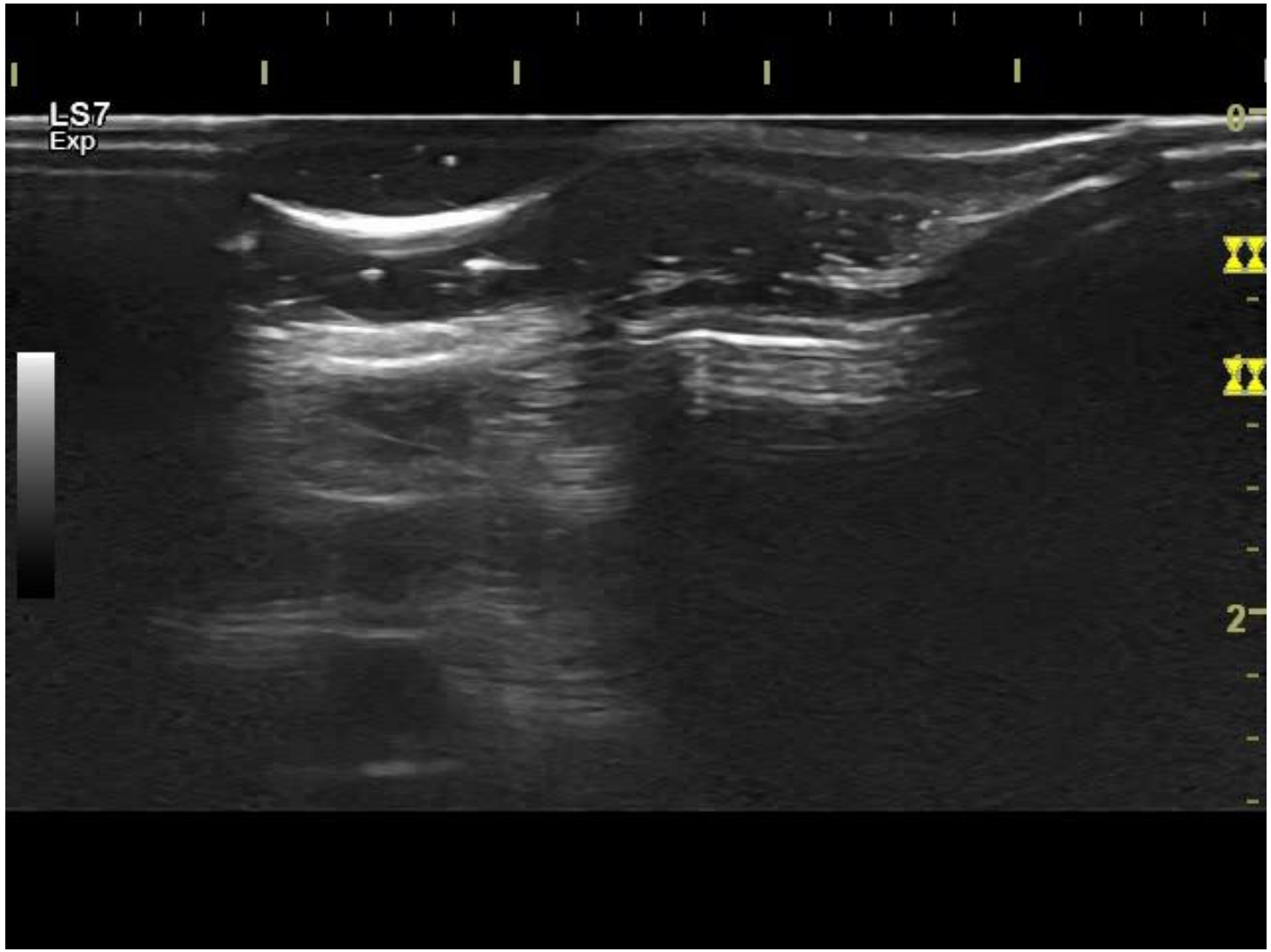
What is your radiological diagnosis?

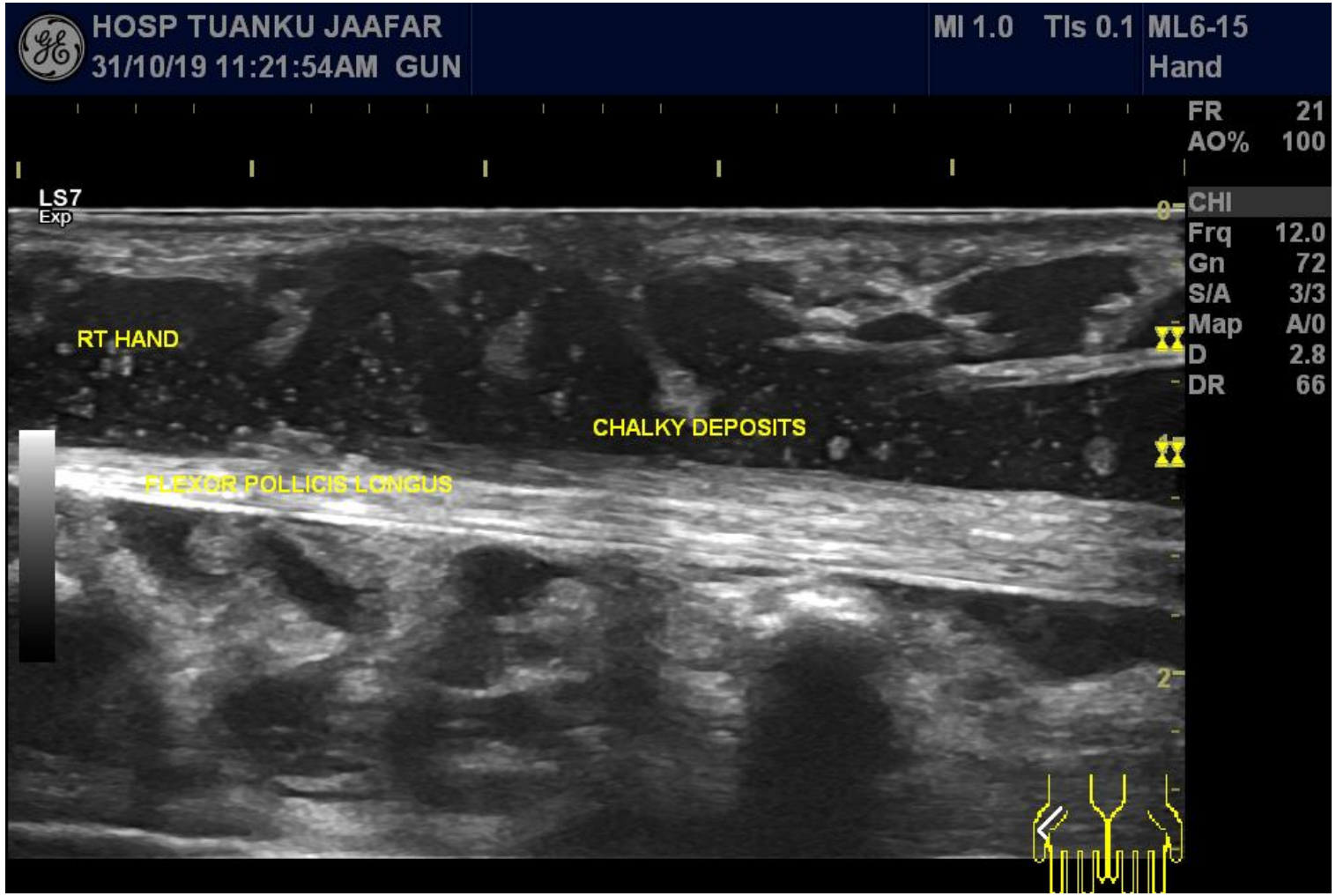
ⓘ Start presenting to display the poll results on this slide.

What is your next step of investigation?

a) Ultrasound hand
b) CT hand
c) MRI hand
d) Joint/finger aspiration

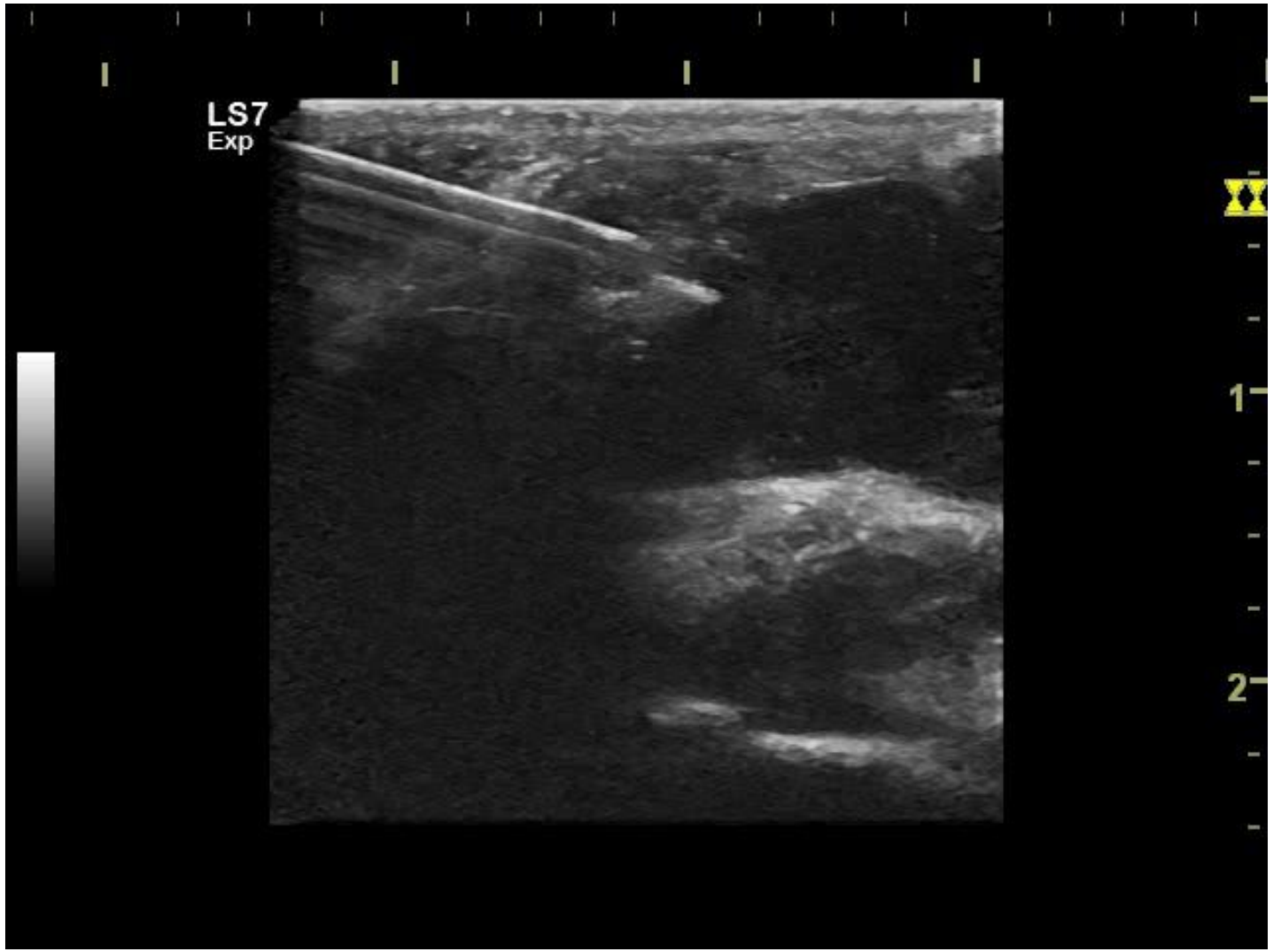
MSUS Hands (Oct 2019)



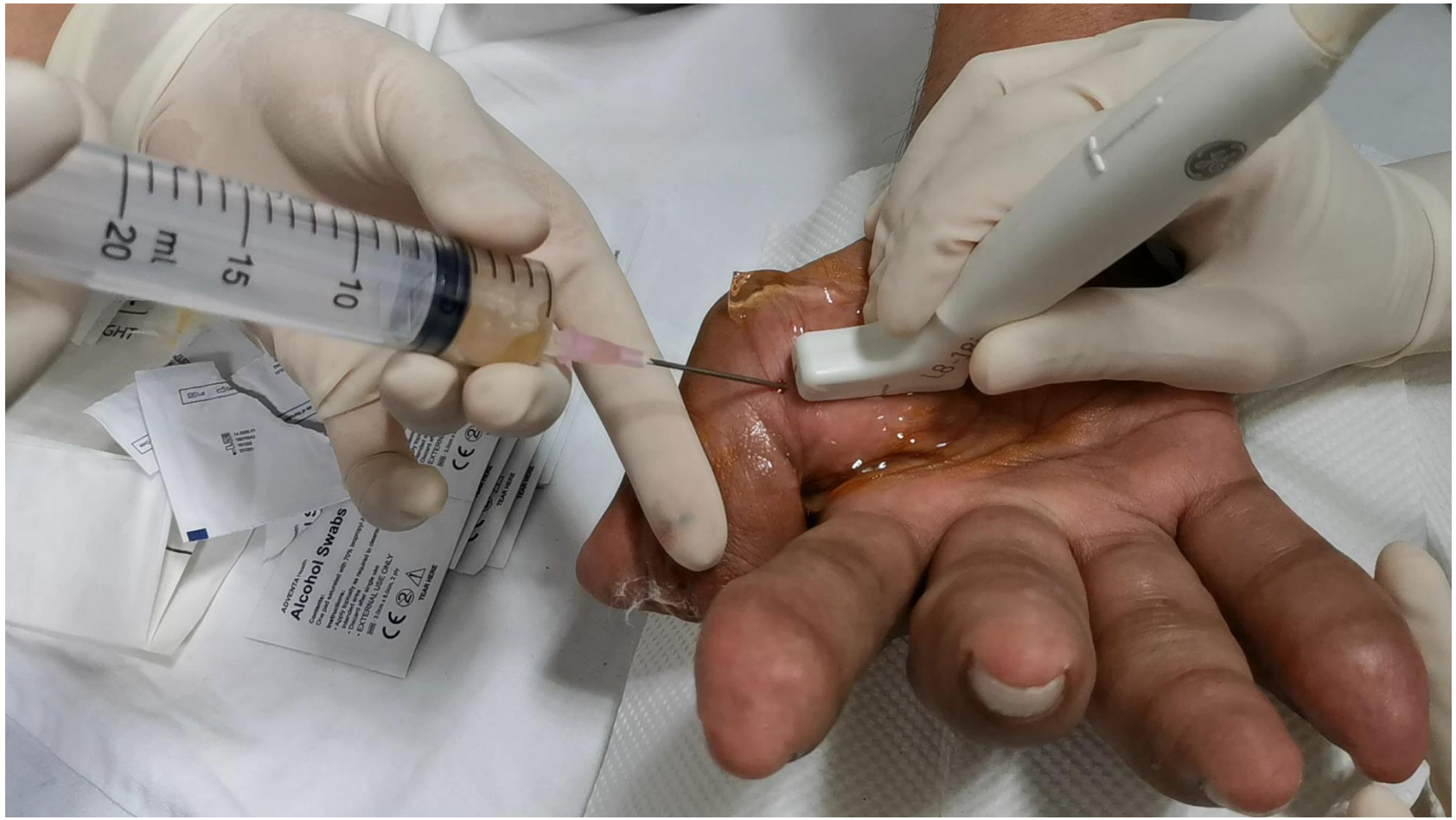


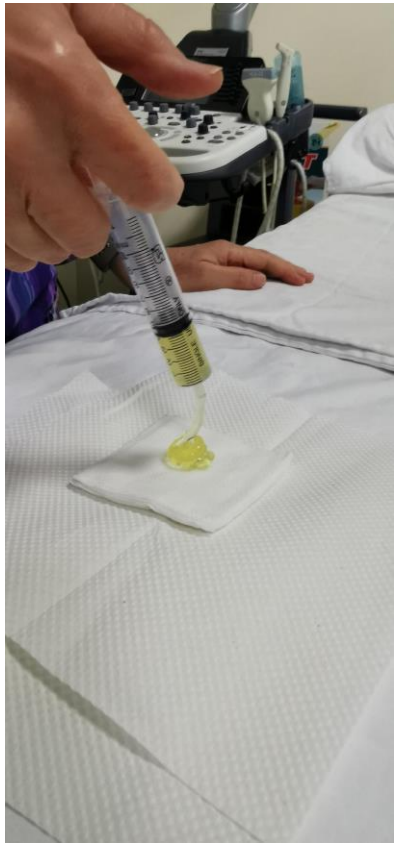
MSUS Hands (Oct 2019)

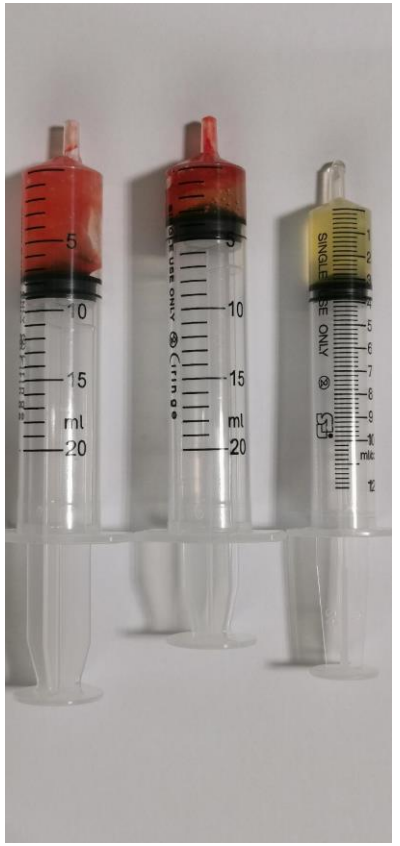
USG guided aspiration



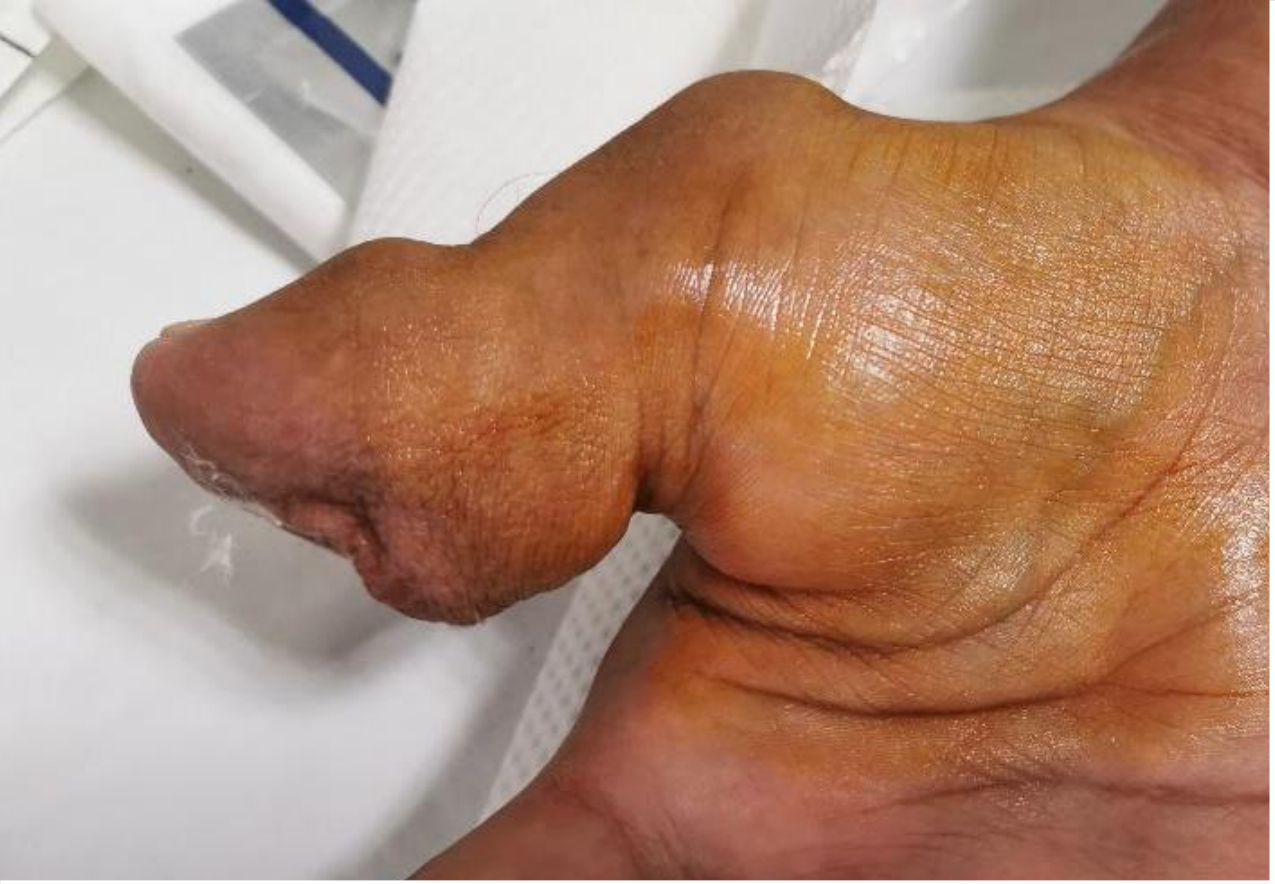
Video & Images

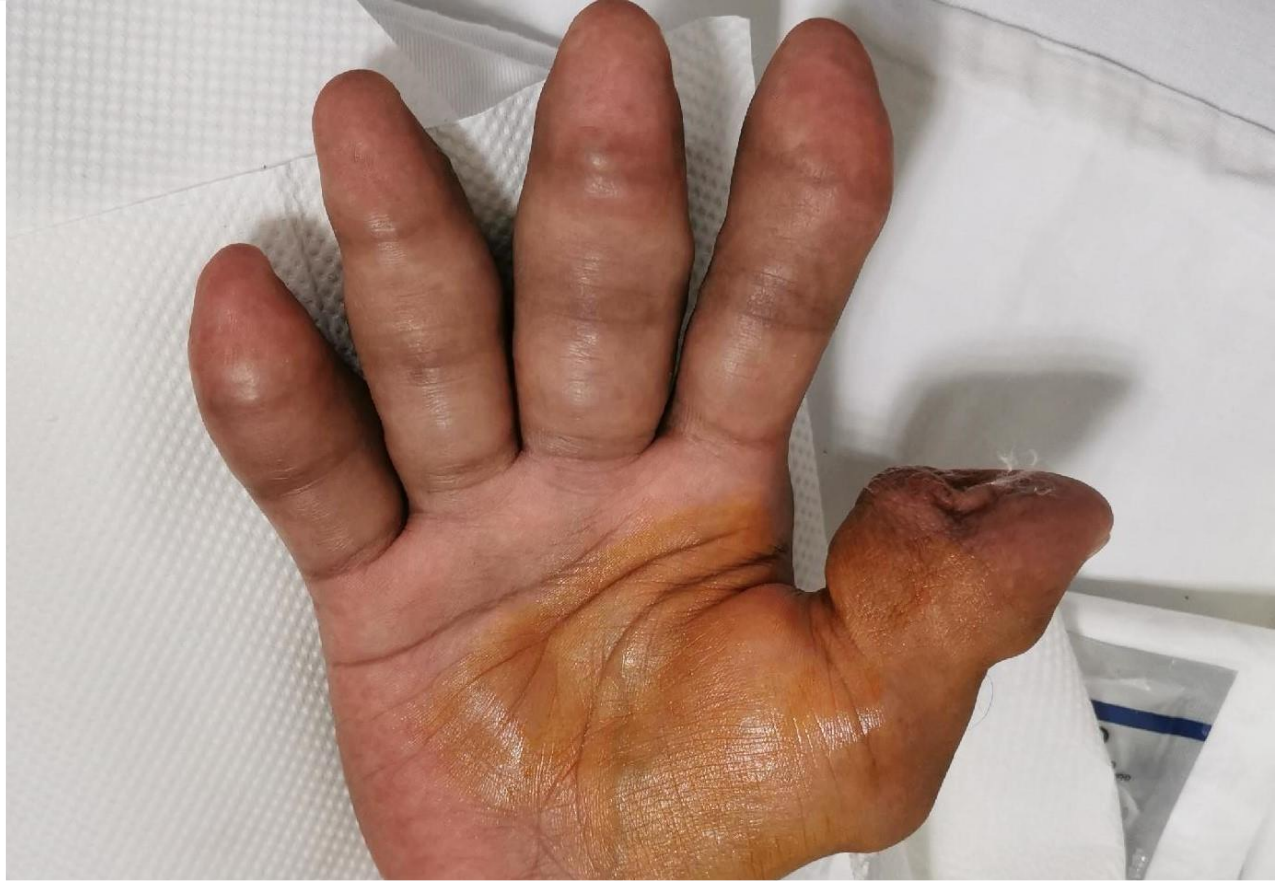






15 cc of gel like aspirate





Post -aspiration

Microscopic analysis

- Minimal negatively birefringent MSU (needle shaped) crystals seen under dark field microscopy
- Fluid for gram stain, c&s and AFB = negative

Impression

(i) Active PsA+ Psoriasis

(with persistent dactylitis)

(ii) Chronic gouty arthritis

Plan

(i) To discuss with patient regarding biologics (S/C Secukinumab)

(ii) For Chest X ray, Mantoux

- Viral screening 2016 was non-reactive
- To complete C.Cloxacillin 500 mg QID for 5 days (prophylaxis)

Clinic Review (Nov 2019)

- Rt thumb feels softer, but size re-accumulating back
- Completed Cloxacillin, no infection over thumb

+ dry cough +sore throat

Chest X ray : cardiomegaly with normal lung fields

Mantoux test 5 mm

<u>Plan</u>

1) T.Augmentin 625 mg TDS for 1/52
2) Sputum AFB x3, sputum C&S, bloods (routine + ESR + CRP)

2 weeks later....

- Cough improved, no fever
- Unable to expectorate phlegm for sputum samples

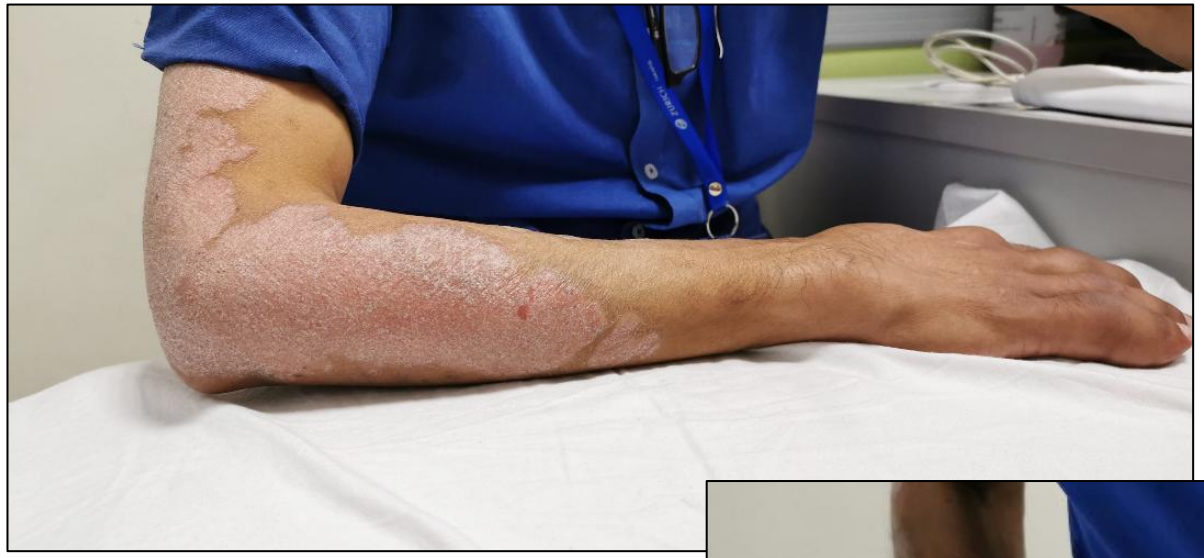
- Was restarted on MTX 5 mg ; however joint pain and skin flare was persistent

BSA 30% ; TJC 19 ; SJC 17 ; Dactylitis :15

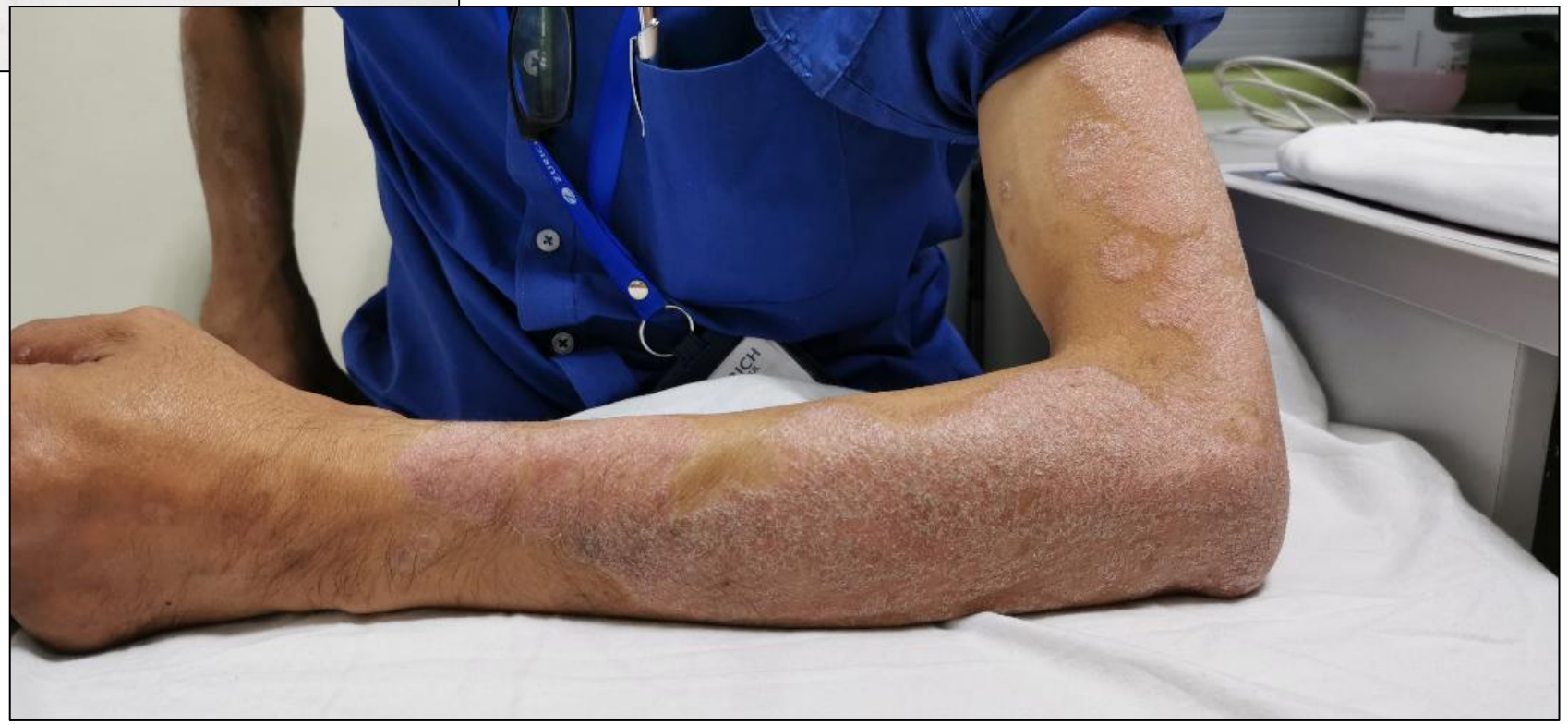
<u>Plan (Nov 2019)</u>

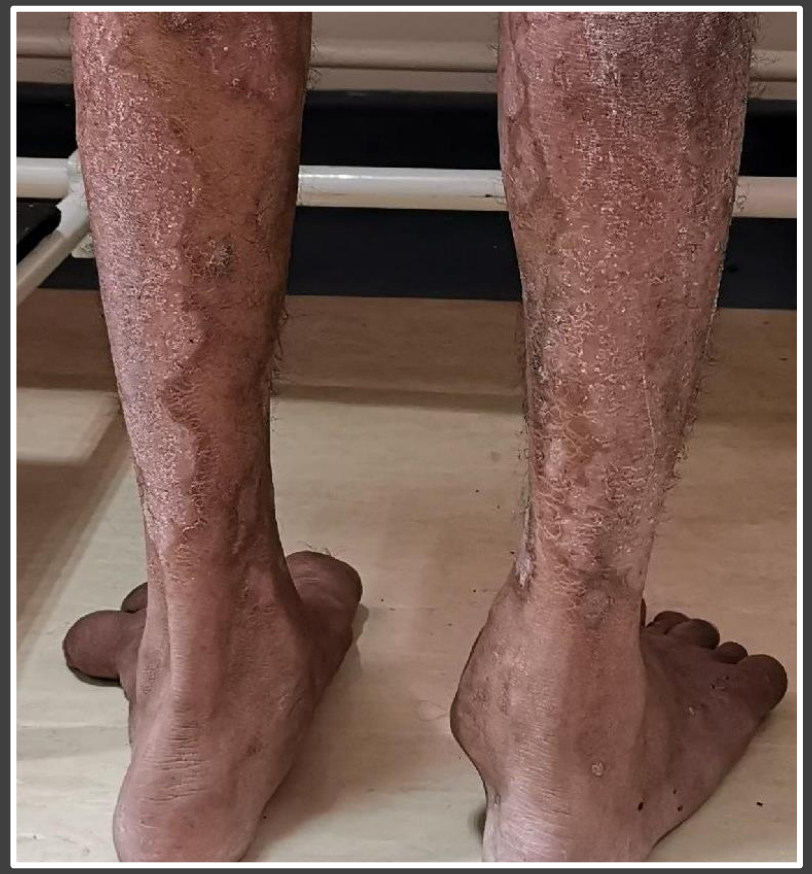
(i) To initiate S/C Secukinumab 300 mg (Week 0,1,2,3,4) then 4 weekly

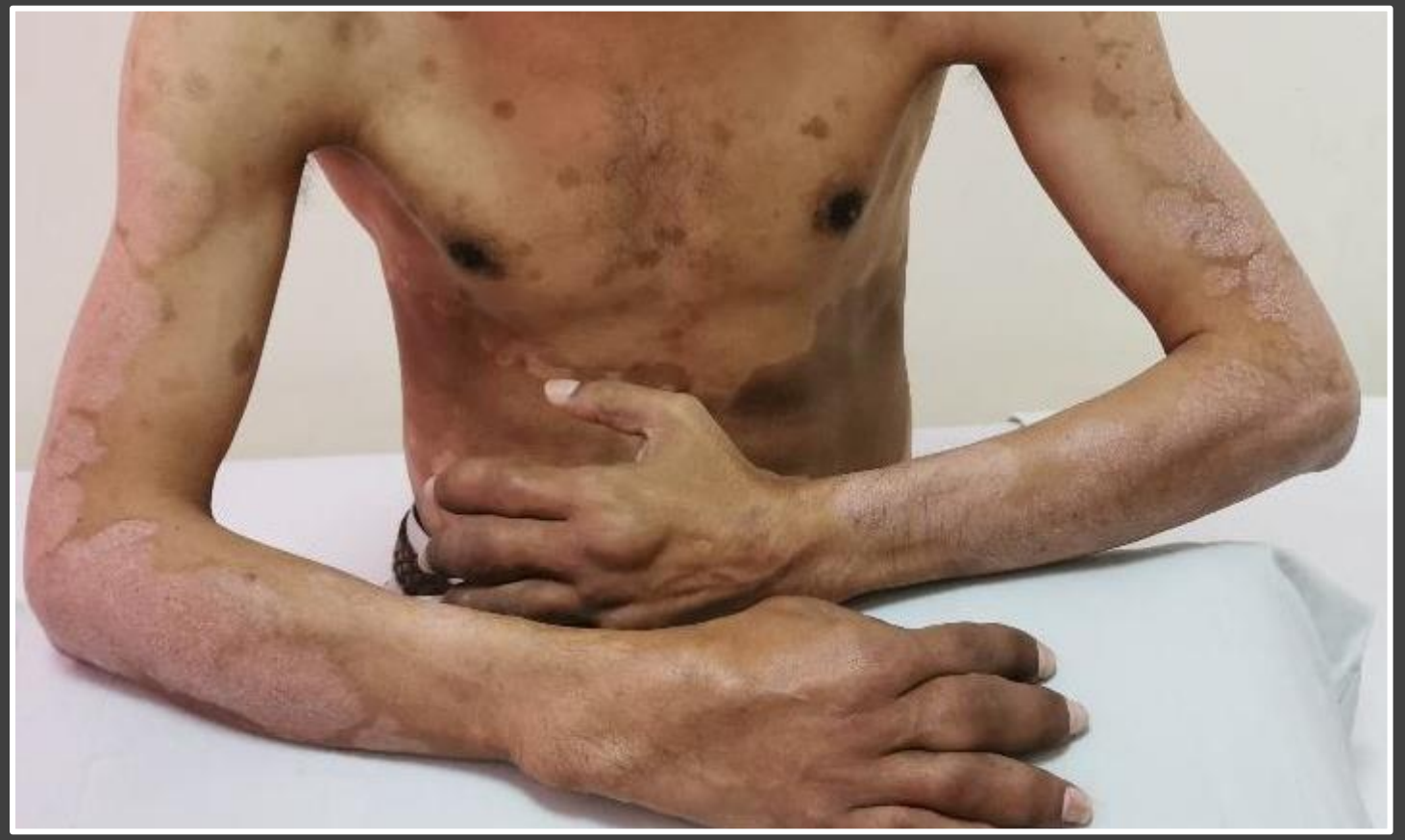
(ii) To aspirate Rt 2nd and 3rd digit



Prior to secukinumab







3 weeks post secukinumab.....

2nd Procedure – 29/11/2019

Local Lignocaine 1 cc infiltrated , 18G needle used
Sterile USG guided technique

Rt 3rd finger = aspirated 15 cc of serous thick gel like matter
Rt 2nd finger= aspirated 7 cc of similar fluid
Rt thumb Thenar region= 9 cc of bloody gel like matter aspirated

Plan

(i) Cloxacillin 500 mg QID, Celebrex PRN
(ii) Cont Secukinumab weekly (loading phase)

Clinic review (Jan 2020)

- Completed 5 doses of weekly Secukinumab

→Skin improving, post inflammatory hypopigmentation

→ BSA reduced : 5%

Rt thumb, index and 3rd digit much smaller

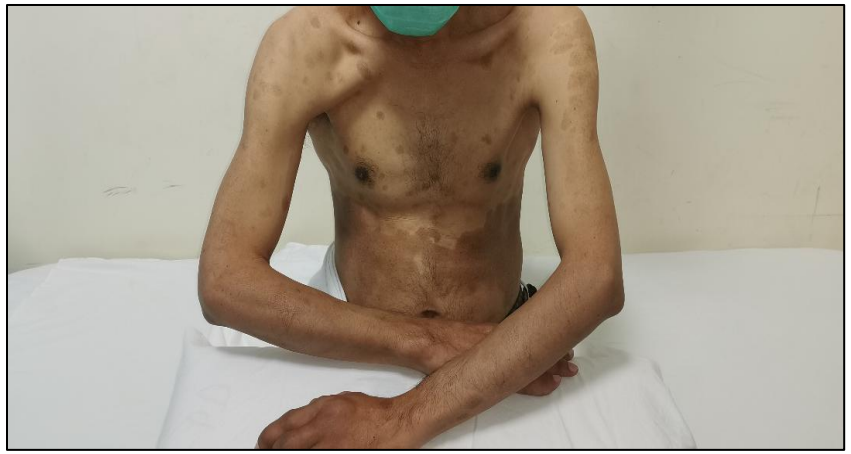
<u>Plan</u>

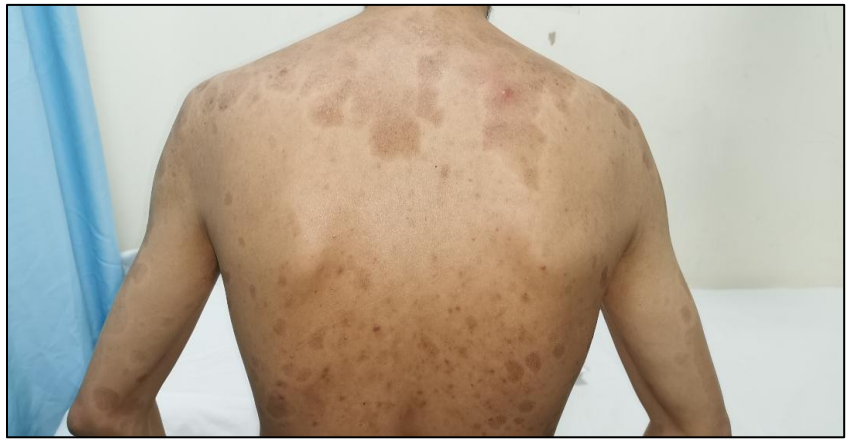
1) Cont MTX 5 mg weekly, folic acid, febuxostat 80 mg OD and probenecid 250 mg BD

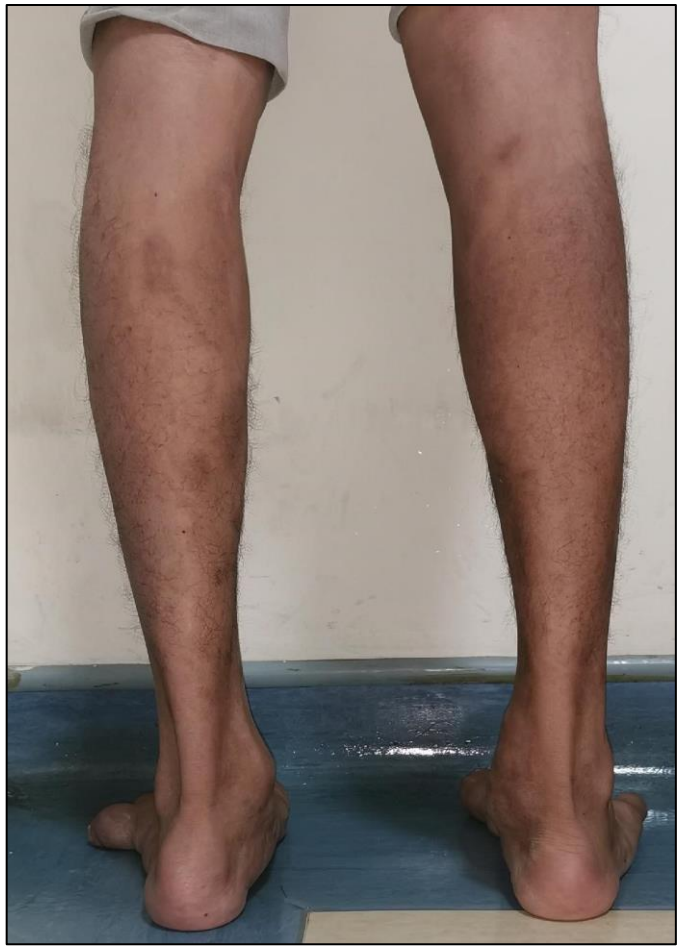
Clinic review (April 2020)

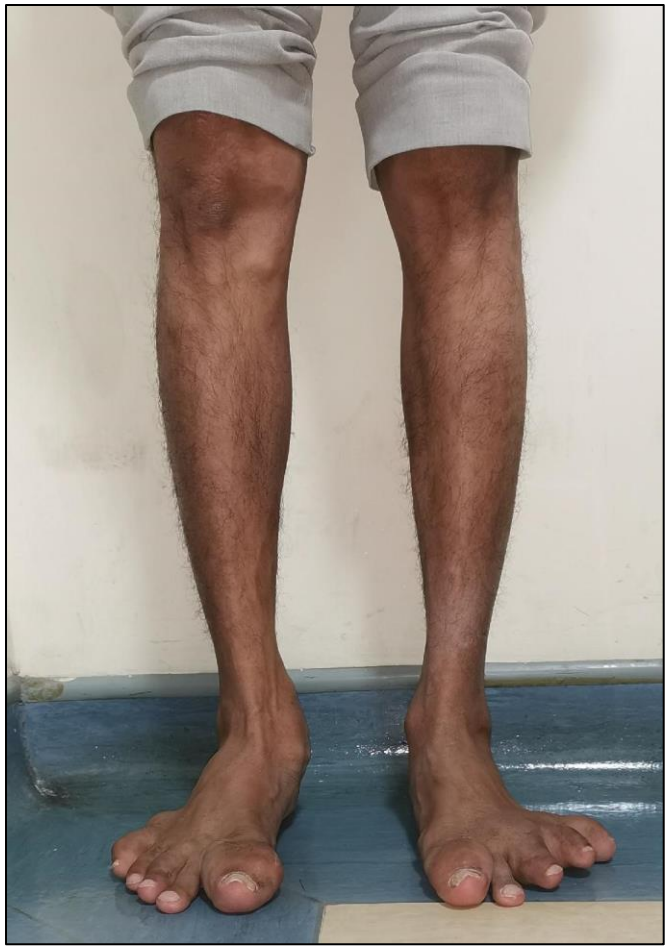
- Skin much better (BSA <1%)
- Joint pain improved
- No lower back pain
- CRP : 28 → 13 → 8.9

5 months post Secukinumab…







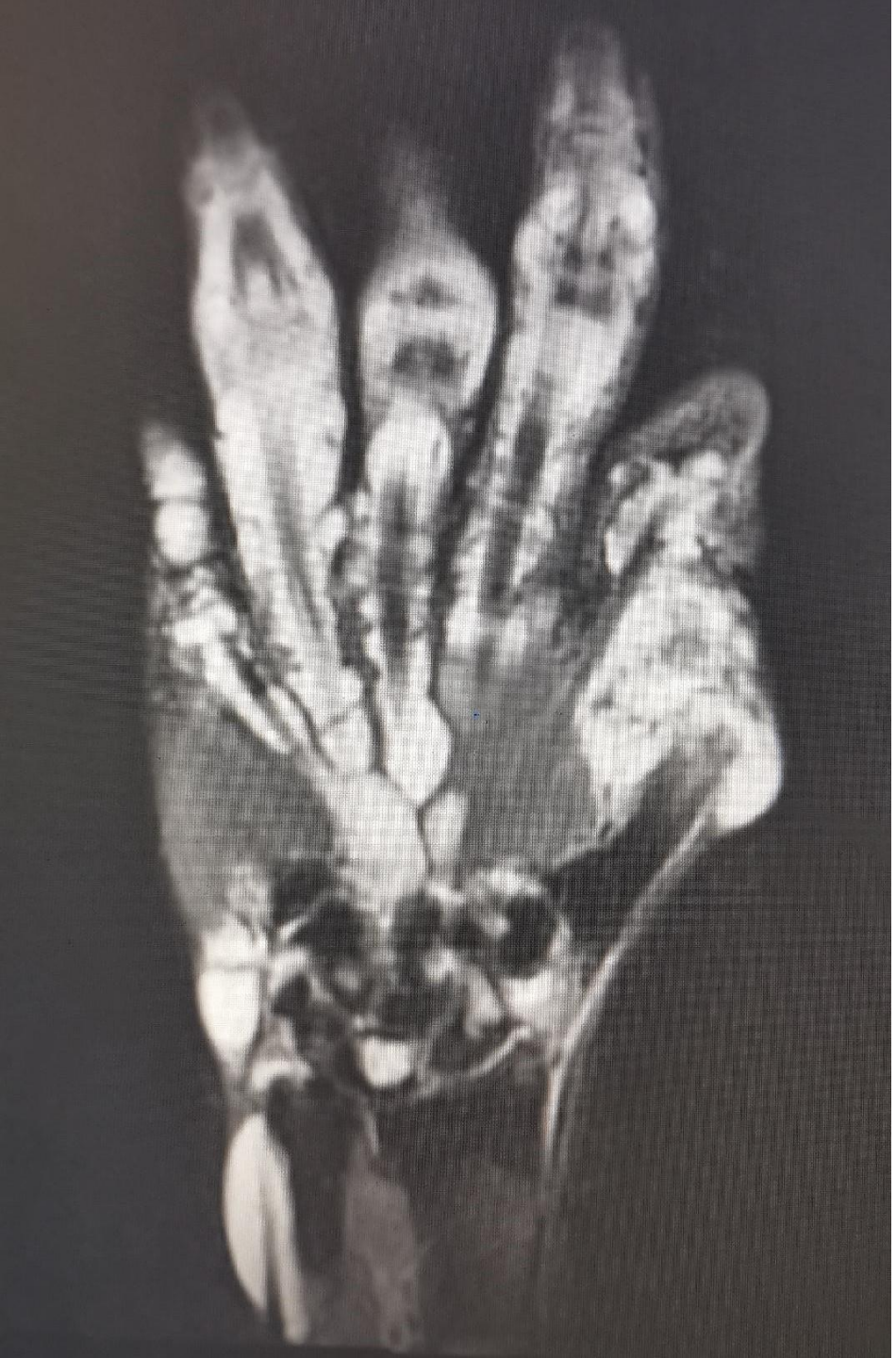


Clinic review (Sept 2020)

- Well
- Skin lesions cleared off (BSA 0%)
- No joint pain/ EMS
- Persistent digit swelling

Plan

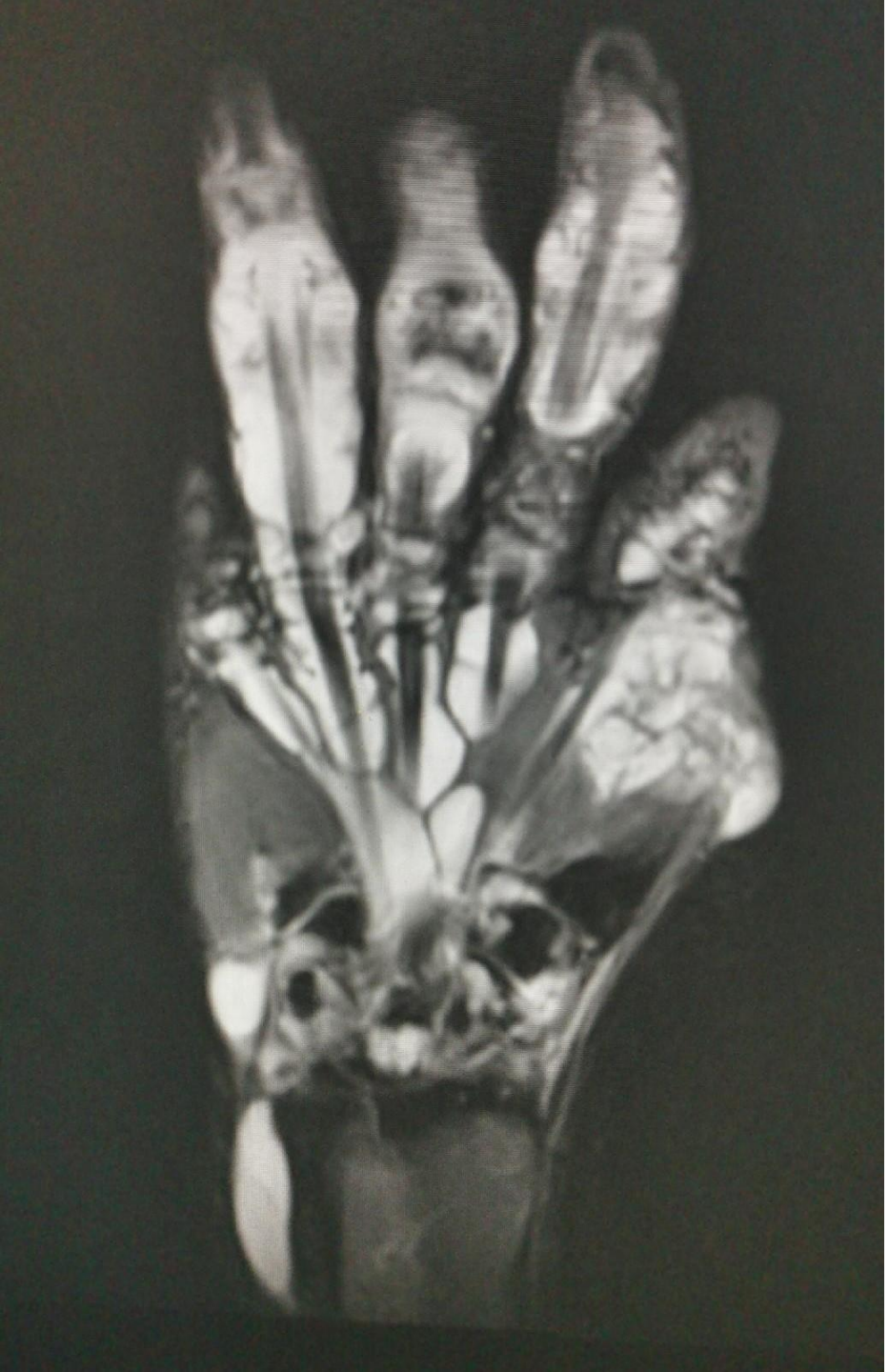
1) To cont S/C Secukinumab, trial of stretching to 5 weekly
2) For MRI Rt hand



MRI Rt Hand(Dec 2020)

- Lobulated peri-tendinous cystic lesion, seen along flexor and extensor tendons
- Tendons signal intensity preserved
- No rice bodies

- Juxta-articular bone erosions involving 1st MCP and 5th PIPJ; 1st MCP subluxation



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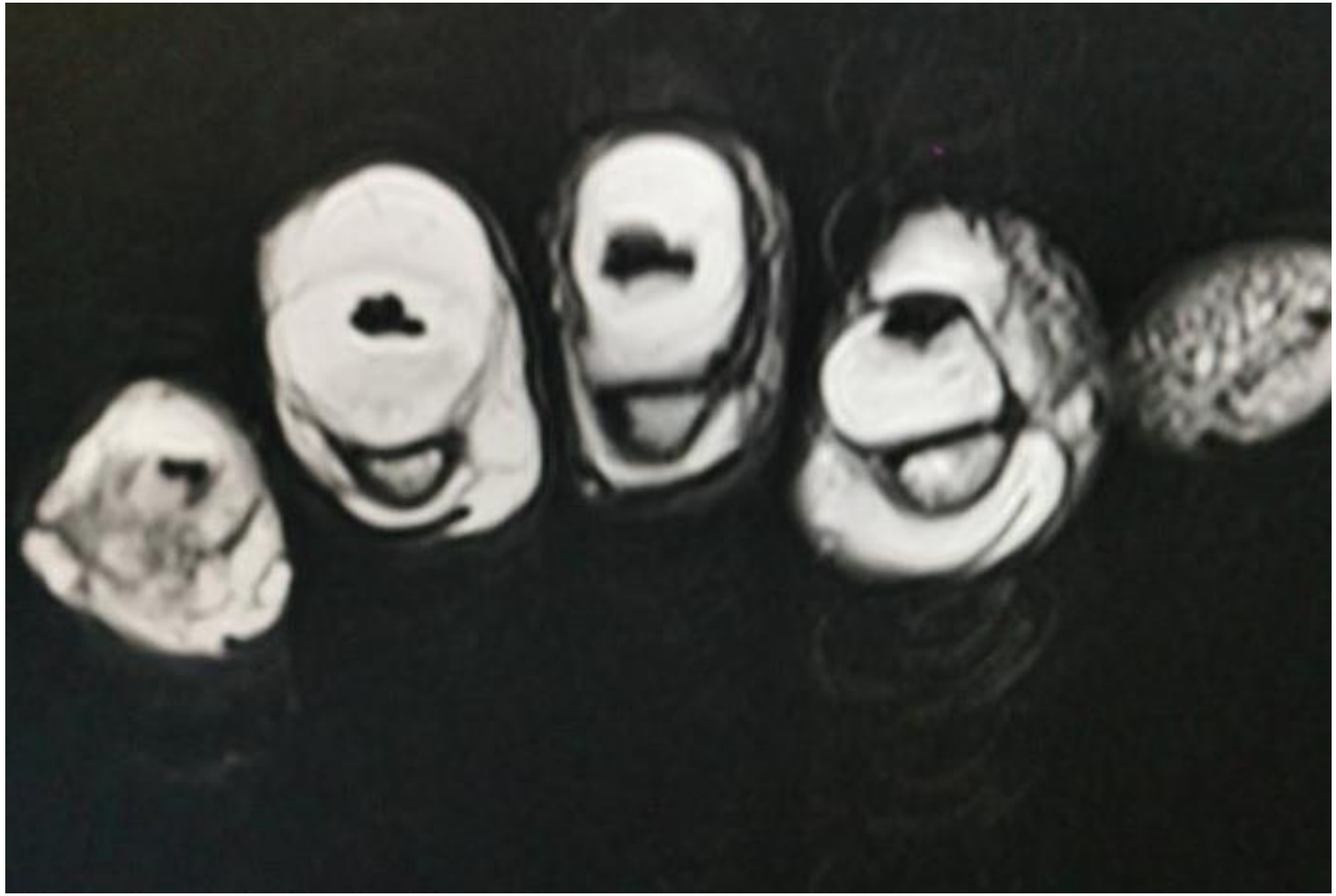
- No rice bodies

- Juxta-articular bone erosions involving 1st MCP and 5th PIPJ; 1st MCP subluxation



MRI Rt hand (Dec 2020) axial view

MRI (Dec 2020)

Impression=

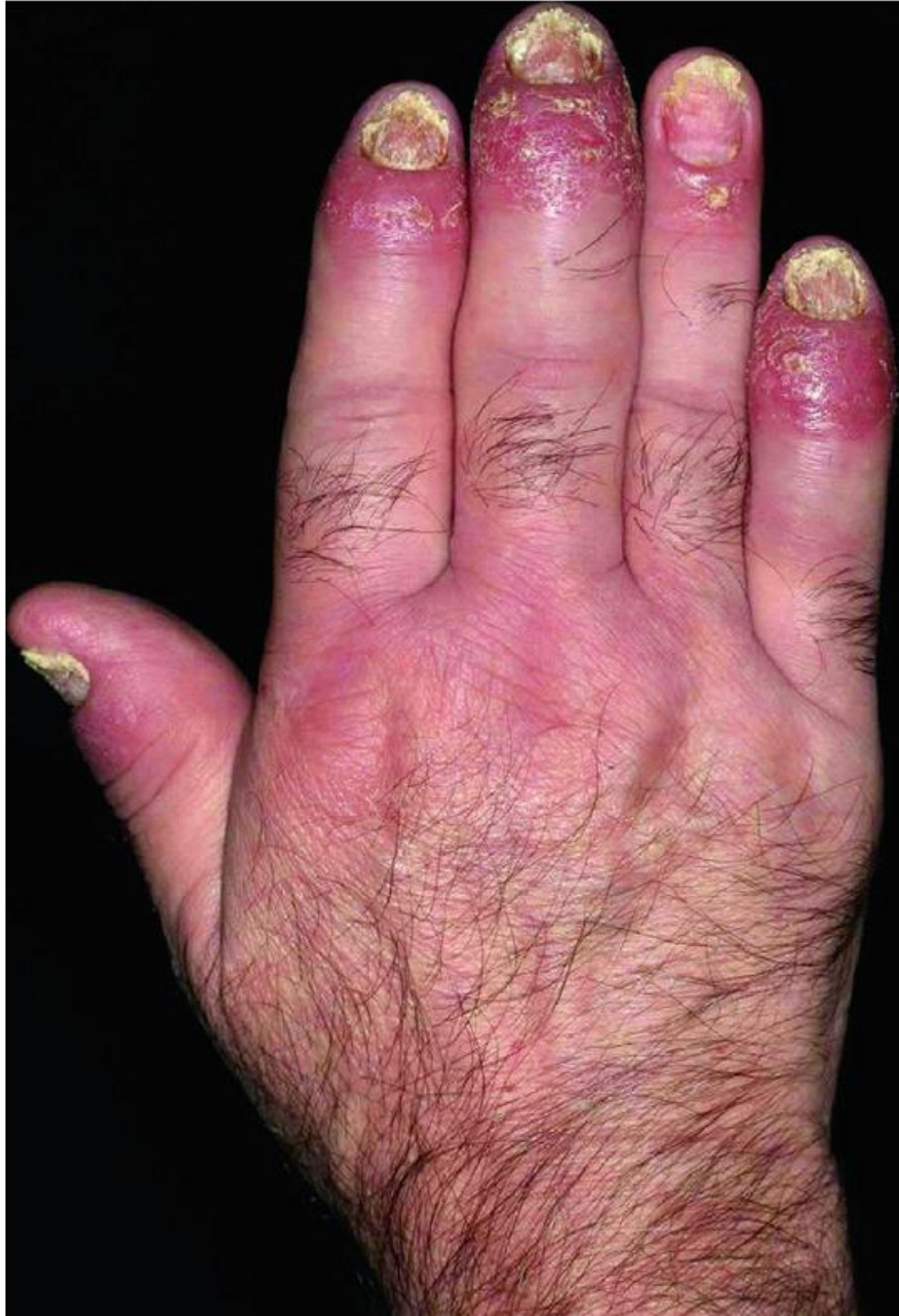
Chronic tenosynovitis causing cystic lesions

with osseous and juxta-articular changes related to gouty arthropathy

Current progress

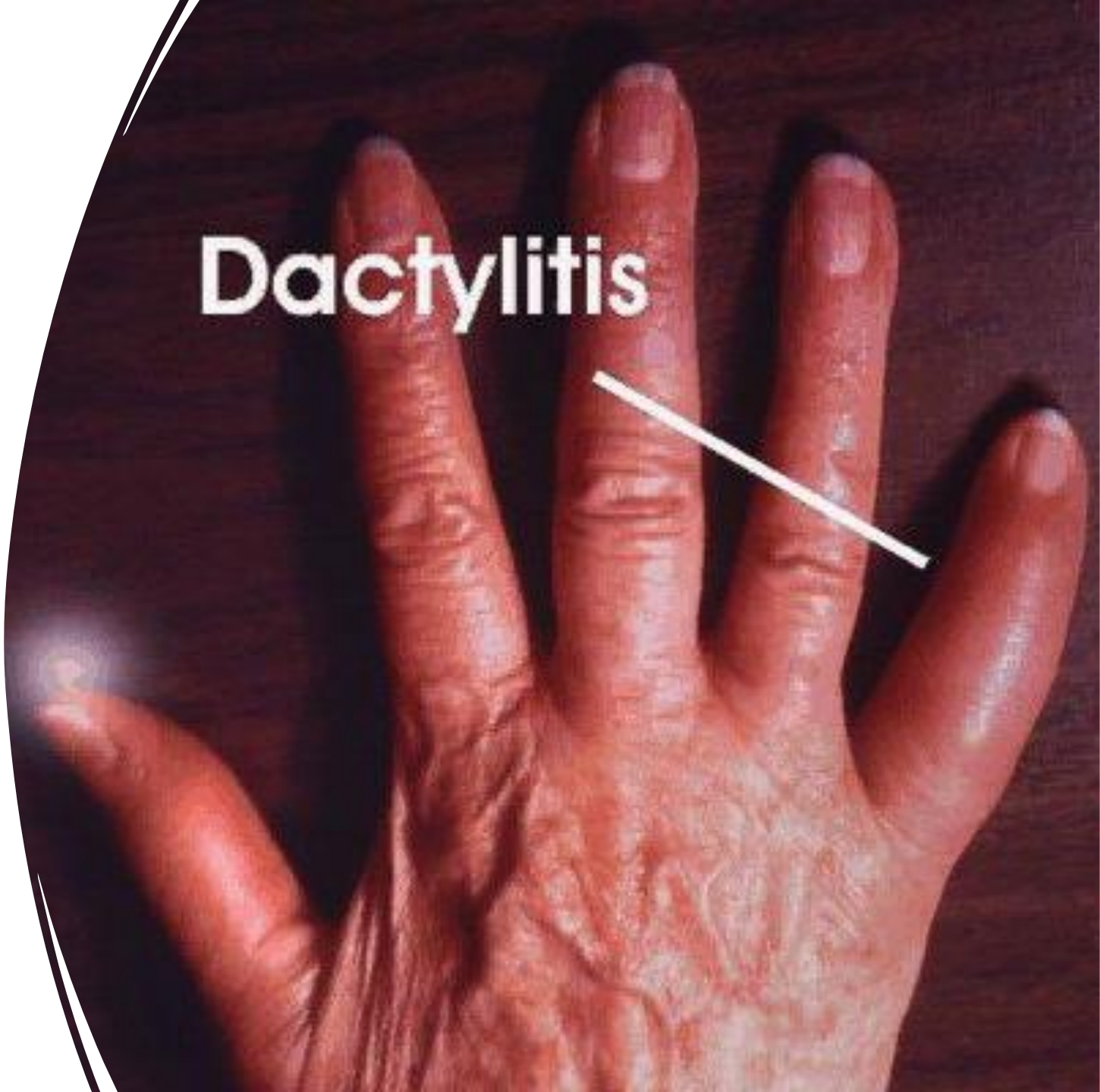
- Pt was last seen in Dec 2020, feeling better now
- Skin lesions completely cleared
- No longer having painful joints/ EMS
- But swelling still persistent, but not reaccumulating on post aspiration fingers (Rt hand)
- Able to continue his job, seeing clients and does direct sales too .
- Has better self confidence

DISCUSSION : DACTYLITIS



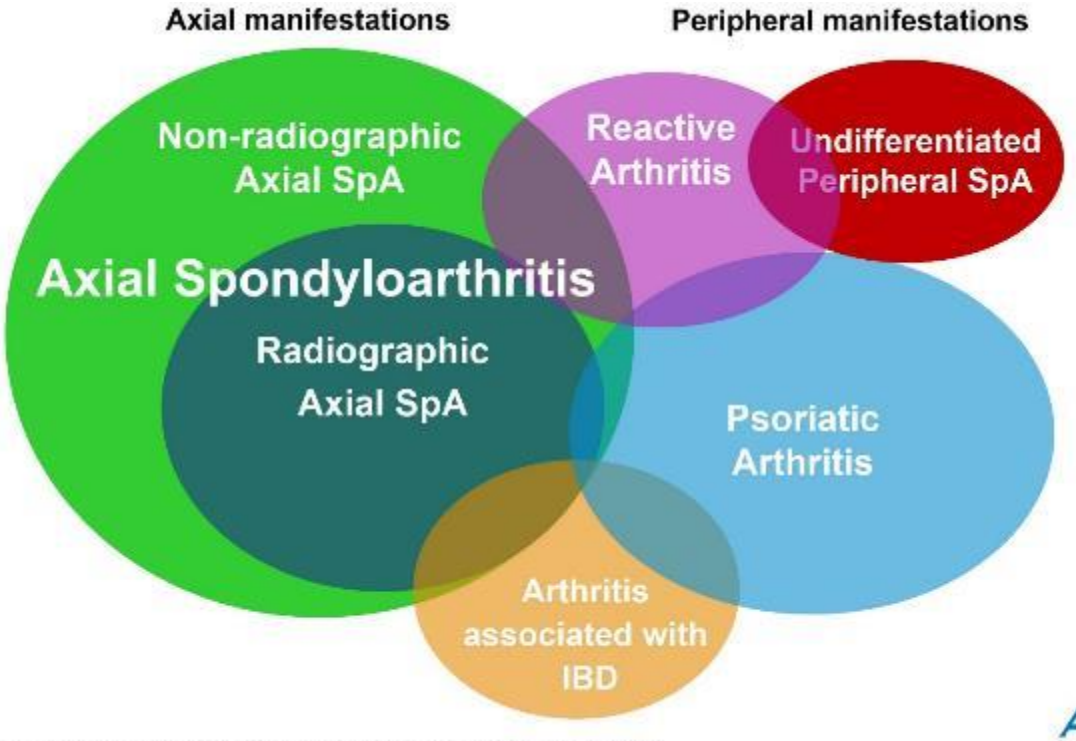
What is Dactylitis?

- a hallmark clinical feature of SpA(PsA)
- is "uniform swelling such that the soft tissues between the MCP and proximal IP, proximal and distal IP, and/or distal IP and digital tuft are diffusely swollen to the extent that the *actual joint swelling could no longer be independently recognized.*



B.M. Rothschild, C. Pingitore, M. Eaton **Dactylitis: implications for clinical practice,** Semin Arthritis Rheum, 28 (1998), pp. 41-47

Spondyloarthritis (SpA)



Modified from Proft F et al. Ther Adv Musculoskelet Dis 2018;10:129-39

- **SpA** is characterized by articular inflammation, erosion, and new bone formation at peripheral and axial sites[1]
- Disorders share distinctive clinical, radiographic, and genetic features
  - Strong association with HLA B27

ASAS Classification Criteria for Spondyloarthritis (SpA)

In patients with ≥3 months back pain and age at onset <45 years

Sacroiliitis on imaging plus ≥1 SpA feature

OR

HLA-B27 plus ≥2 other SpA features

SpA features

- inflammatory back pain (IBP)
- arthritis
- enthesitis (heel)
- uveitis
- dactylitis
- psoriasis
- Crohn's/colitis
- good response to NSAIDs
- family history for SpA
- HLA-B27
- elevated CRP

Sensitivity: 79.5%, Specificity: 83.3%; n=975

In patients with peripheral symptoms ONLY

Arthritis or enthesitis or dactylitis

plus

≥1 SpA feature

- uveitis
- psoriasis
- Crohn's/colitis
- preceding infection
- HLA-B27
- sacroiliitis on imaging

OR

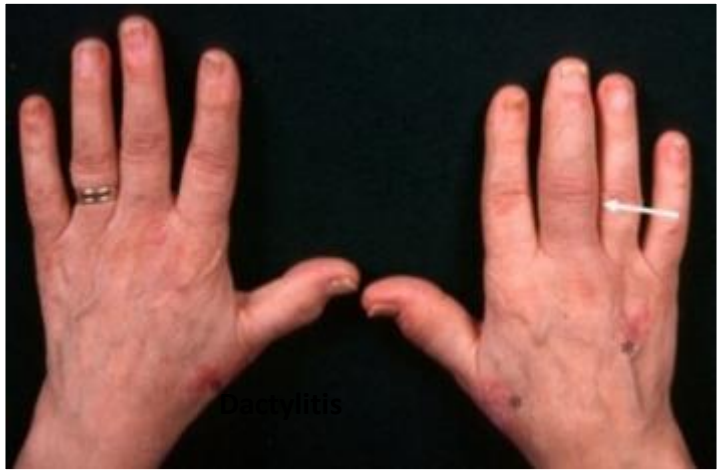
≥2 other SpA features

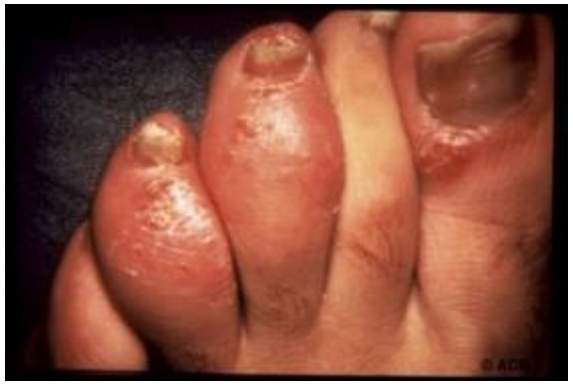
- arthritis
- enthesitis
- dactylitis
- IBP ever
- family history for SpA

Rudwaleit M et al. Ann Rheum Dis 2011;70:25-31 (with permission)

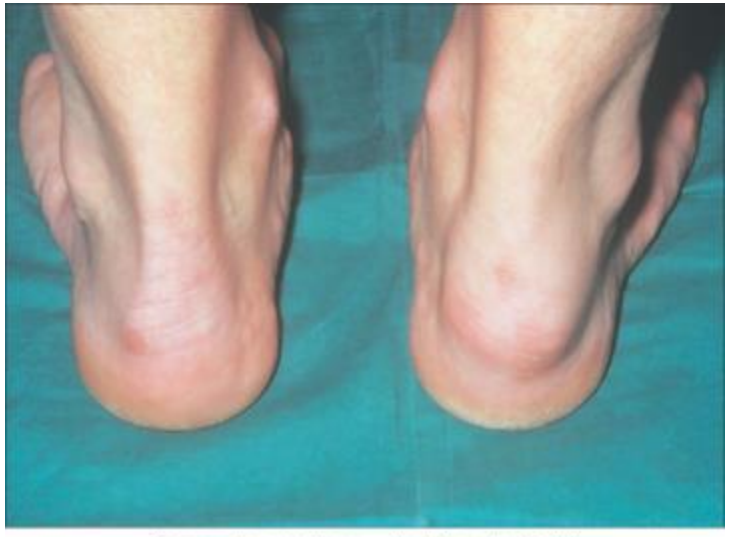
ASAS

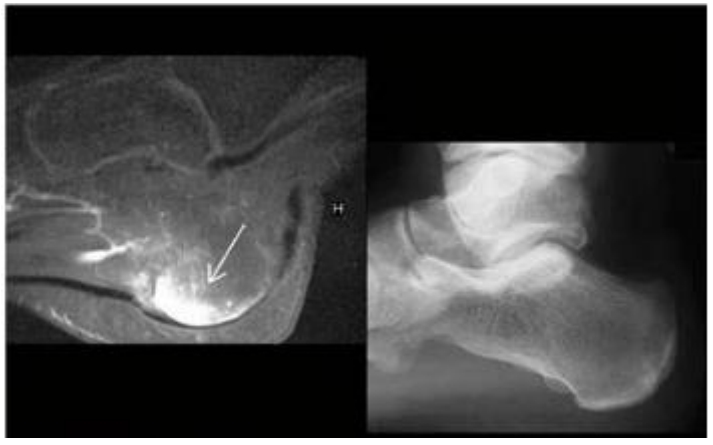
Clinical Manifestations



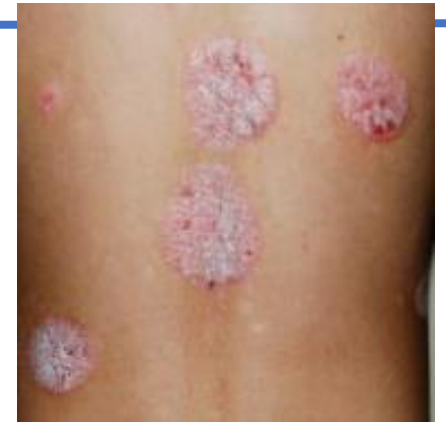


Dactylitis

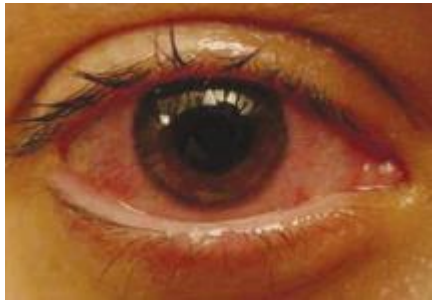




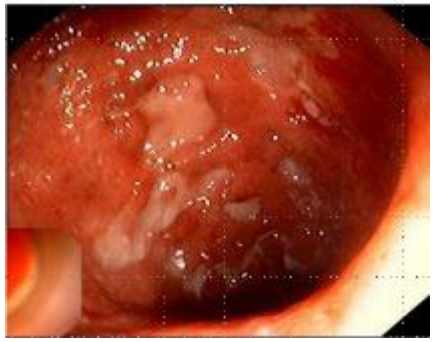
Enthesitis



Psoriasis



Uveitis



Gut Lesions

RheumTutor.com

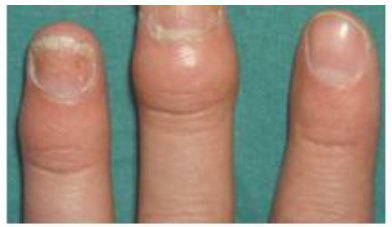
CASPAR (ClASsification criteria for Psoriatic ARthritis) Criteria

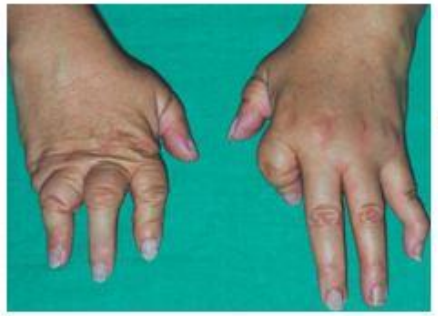
A patient must have inflammatory articular disease (joint, spine or entheseal) and ≥ 3 points from the following categories

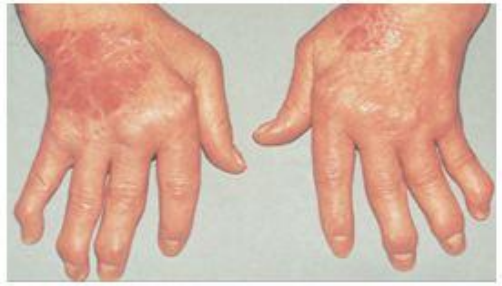
Category	Description	Points
Current psoriasis or personal or family history of psoriasis	Current psoriasis: skin or plaque disease confirmed by rheumatologist or dermatologist. Personal history: obtained from patient, family physician, dermatologist, rheumatologist or other qualified health care provider. Family history: presence of psoriasis in 1° or 2° relative as reported by patient.	2 (current) OR 1 (history)
Psoriatic nail dystrophy on current examination	Onycholysis, pitting, hyperkeratosis.	1
Negative rheumatoid factor (RF)	Any method except latex, but preferably Enzyme-linked immunosorbent assay (ELISA) or nephelometry, using local laboratory reference range.	1
Dactylitis (current or on history as recorded by rheumatologist)	Swelling of an entire digit	1
Radiographic evidence of juxta-articular new-bone formation.	Ill-defined ossification near joint margins but excluding osteophyte formation on plain XRays of the hand or foot.	1

Sensitivity 91.4% Specificity 98.7%

Psoriatic Arthritis (PsA)







1959
Verna Wright[1]

DIP and nail disease

Arthritis mutilans

Polyarthritis (RF-)

1973
John Moll and Verna Wright[2]

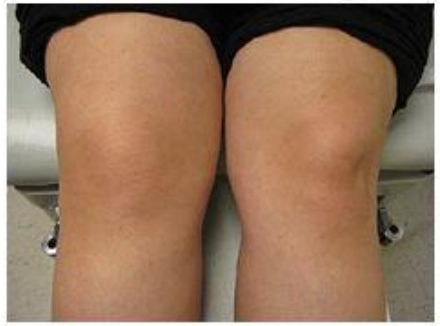
DIP predominant arthritis

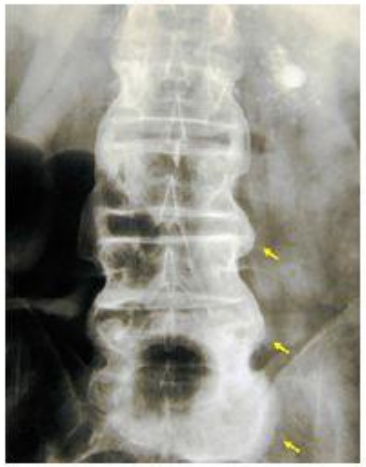
Arthritis mutilans

Symmetrical polyarthritis

Asymmetrical oligoarticular arthritis

Predominant spondylitis





1. Wright V. Psoriasis and arthritis. Ann Physical Med 1959
2. Moll, Wright. Psoriatic Arthritis. Semin Arthritis Rheum 1973

5 subtypes in Psoriatic Arthritis (PsA)

DISCUSSION : Dactylitis

Dactylitis is due to inflammation of tissues in a digit

- tendon sheath
- joint
- bone
- soft tissue

.

Healy PJ, Groves C, Chandramohan M, Helliwell PS. MRI changes in psoriatic dactylitis extent of pathology, relationship to tenderness and correlation with clinical indices. Rheumatology 2008; 47(1):92-95

DISCUSSION : Dactylitis

- Dactylitis occurs in 16–49% of patients with PsA, often early in disease.
- In PsA, dactylitis is a condition that usually is *asymmetrical*, affects the *right* more than left side, involves *feet* more than hands.

J.E. Brockbank, M. Stein, C.T. Schentag, D.D. Gladman **Dactylitis in psoriatic arthritis: a marker for disease severity?** Ann Rheum Dis, 64 (2005), pp. 188-190

DISCUSSION : Dactylitis

- Dactylitis can present as a tender, often erythematous, warm digit (acute/tender) or as a swollen, asymptomatic digit (chronic/non-tender)
- when dactylitis occurs in a finger with synovial sheaths that communicate with ulnar palmocarpal sheaths, swelling can extend to the palm, ulnar bursa, or radial bursa
- Dactylitis is a marker of disease severity; significantly greater joint damage

A. Padula, C. Salvarani, L. Barozzi, M. De Matteis, P. Pavlica, F. Cantini, *et al.* **Dactylitis also involving the synovial sheaths in the palm of the hand: two more cases studied by magnetic resonance imaging**

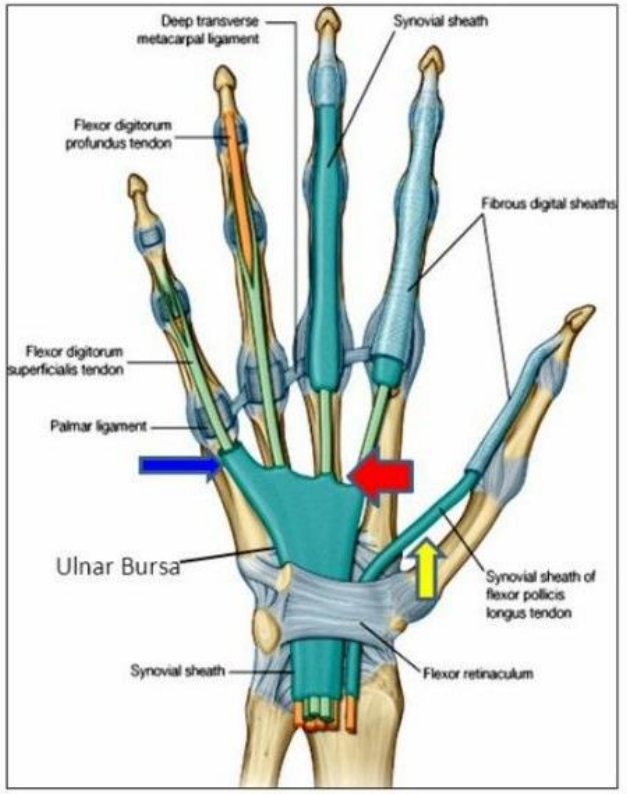
Ann Rheum Dis, 57 (1998), pp. 61-62

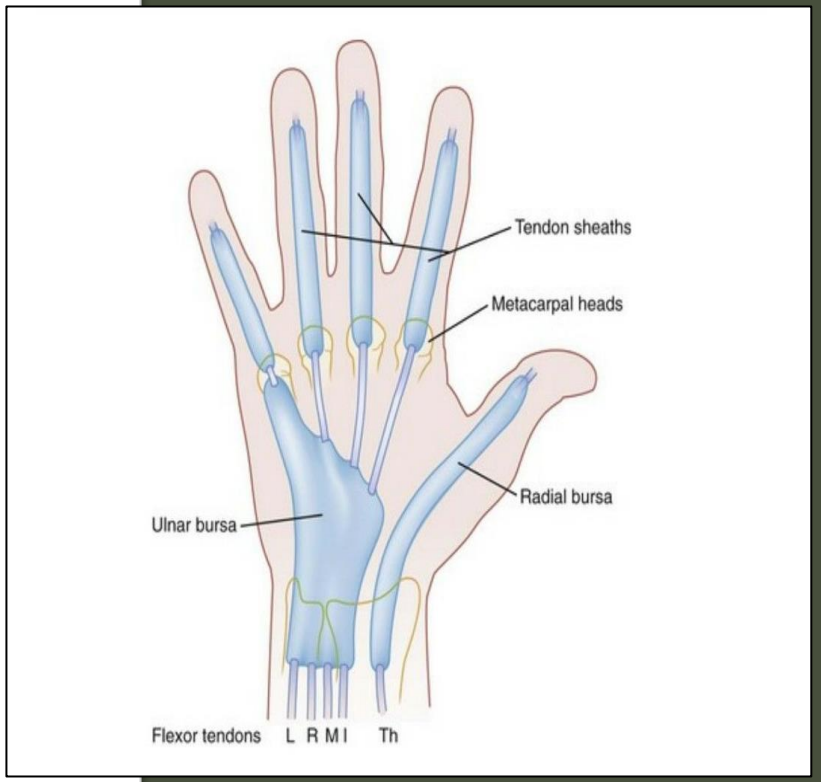
Synovial Flexor Sheaths

Common Synovial sheath

- (Ulnar Bursa)
- Invigilates all tendons of flexor digitorum superficialis & profundus
- The **Medial** part of the sheath extends distally (without interruption) on the tendons of the little finger.
- The **Lateral** part of the sheath stops on the middle of the palm.
- The distal ends of the long flexor tendons to(Index, Middle & Ring) fingers acquire digital synovial sheaths.

Flexor Pollicis Longus tendon has its own synovial sheath ***(Radial Bursa)***





DISCUSSION : Dactylitis

- Dactylitis can be an independent predictor of cardiovascular morbidity in PsA. In a large cohort study of patients with PsA, each dactylitic digit was associated with a 20% higher risk of future cardiovascular event.

L. Eder, Y. Wu, V. Chandran, R. Cook, D.D. Gladman**Incidence and predictors for cardiovascular events in patients with psoriatic arthritis.** Ann Rheum Dis, 75 (2016), pp. 1680-1686

DISCUSSION : Dactylitis

Imaging studies have revealed that dactylitis is a highly heterogeneous, mainly pandigital disease.

- tenosynovitis (with flexor tendons being more frequently affected than the extensor tendons)
- joint synovitis
- soft-tissue and bone marrow edema
- erosive bone damage

I. Olivieri, C. Salvarani, F. Cantini, E. Scarano, A. Padula, L. Niccoli, *et al.* **Fast spin echo-T2-weighted sequences with fat saturation in dactylitis of spondylarthritis.** Arthritis Rheum, 46 (2002), pp. 2964-2967

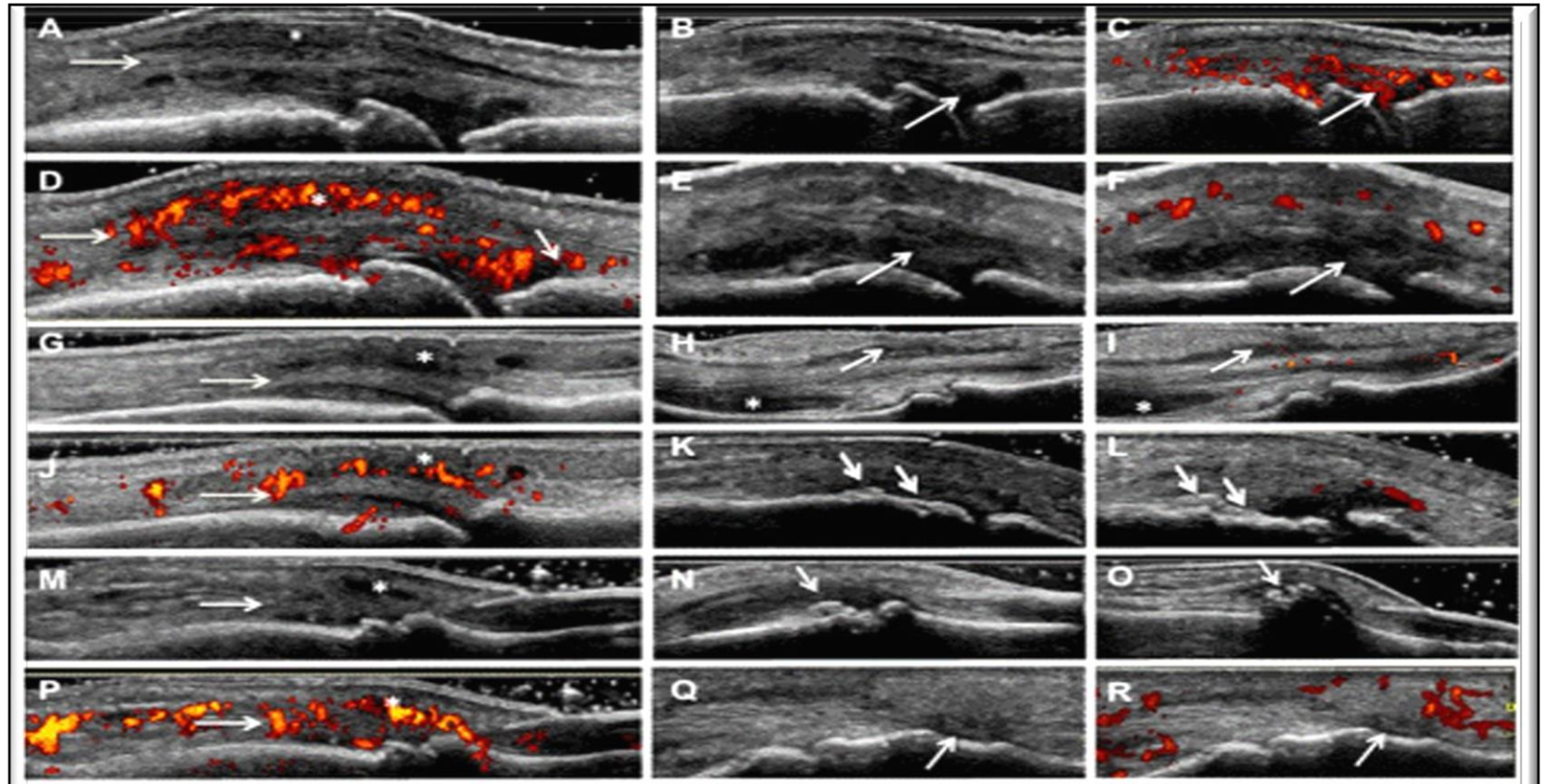
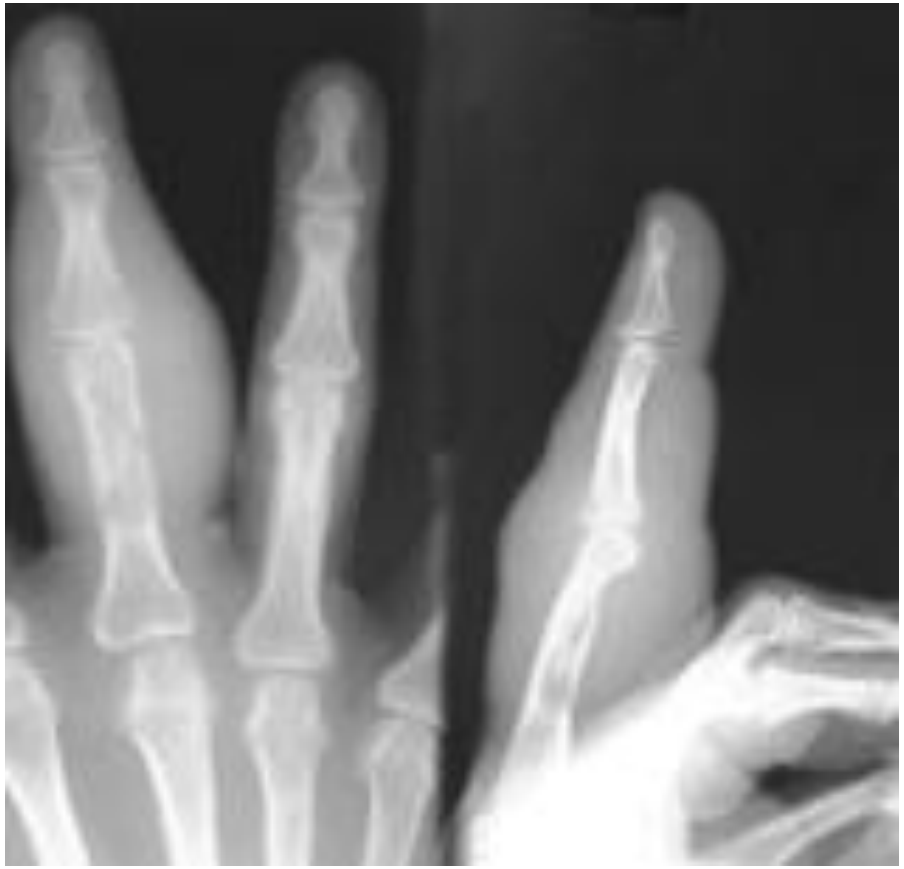


Figure. Ultrasound lesions in dactylitis. Longitudinal scans of digital extensor tendons in GS (A,G,M) and in PD (D, J, P) US showed extensive peritendinous inflammation. Note the tendon thickening (A,G,M), the loss of fibrillar pattern (A,G) and hypoechogenicity (A,M) of the extensor tendon. Digital extensor tendonitis or paratenonitis at the MCP joint (A,D), at the PIP joint (G,J) and at the synovio-entheaseal complex at the DIP joint (M,P) (arrows in panels A,D,G,J,M,P indicate digital extensor tendon and asterisks indicate anechoic or hypoechoic material around the dorsal extensor tendon with PD signals). Longitudinal US scans of MCP and PIP joints in GS (B,E) and PD C,F) mode. PD positive (C) and PD Doppler negative (F) synovitis at the MCP joint (B,C) and at the PIP joint (E,F). Note the pericapsular PD signals in panel F (arrows in panels B,C,E,F indicate synovial hyperthrophy) with (C) or without (F) PD signals. Longitudinal scans of digital flexor tendon (H,I) at the PIP joint. Tenosynovitis of flexor digital tendon is depicted in GS (H) and PD (I) mode. Note the hypoechoic thickened tissue (arrows) with fluid (asterisk) inside the tendon sheath (H) with few synovial and intra-tendinous PD signals (I). Osteoproliferation at the PIP joint (K,L) and at the DIP joint (N,O) depicted in longitudinal scans. Enthesitis of digital flexor tendon is depicted in GS (Q) and PD (R). The latter finding is rare (arrows indicate enthesitis).

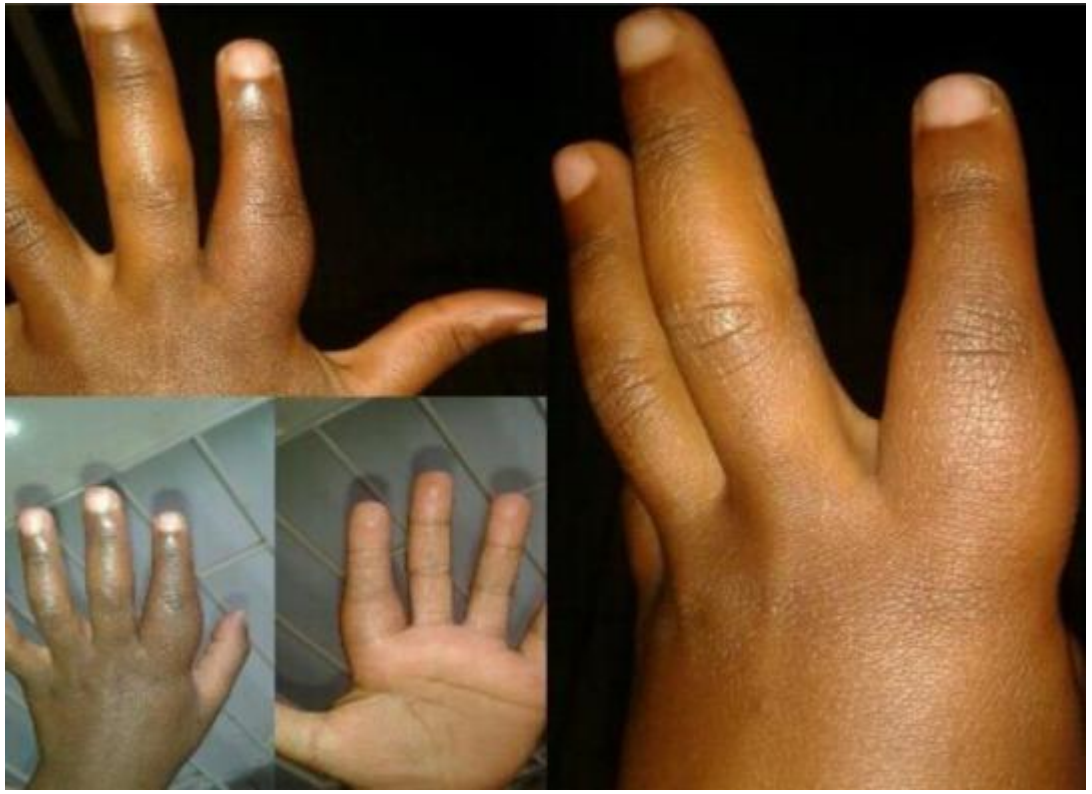
Other causes of dactylitis…?

Tuberculous dactylitis

- also known as **spina ventosa**
- is a rare skeletal manifestations of TB
- mainly occurs through lympho-hematogenous spread. The lung is the primary focus in 75% of cases.
- Involving the short tubular bones (i.e. phalanges, metacarpals, metatarsals)
- Affects children more often than adults
- X-ray : diaphyseal expansile lesion



CASE REPORT



CASE REPORT

Tuberculous Dactylitis: An Uncommon Presentation of Skeletal Tuberculosis

Workeabeba Abebe[1], Betel Abebe[1,] Kebede Molla[1], Tinsae Alemayehu[1]

ABSTRACT

BACKGROUND: *Skeletal involvement accounts 1-5% of all cases of Tuberculosis. The vertebrae are more commonly affected. The bones of the hands are more affected than the bones of the feet. The term "spina ventosa" has been used to describe this disorder because of its radiographic features of cystic expansion of the involved short tubular bones. Tuberculous dactylitis mainly occurs through lympho-hematogenous spread. The lung is the primary focus in 75% of cases.*

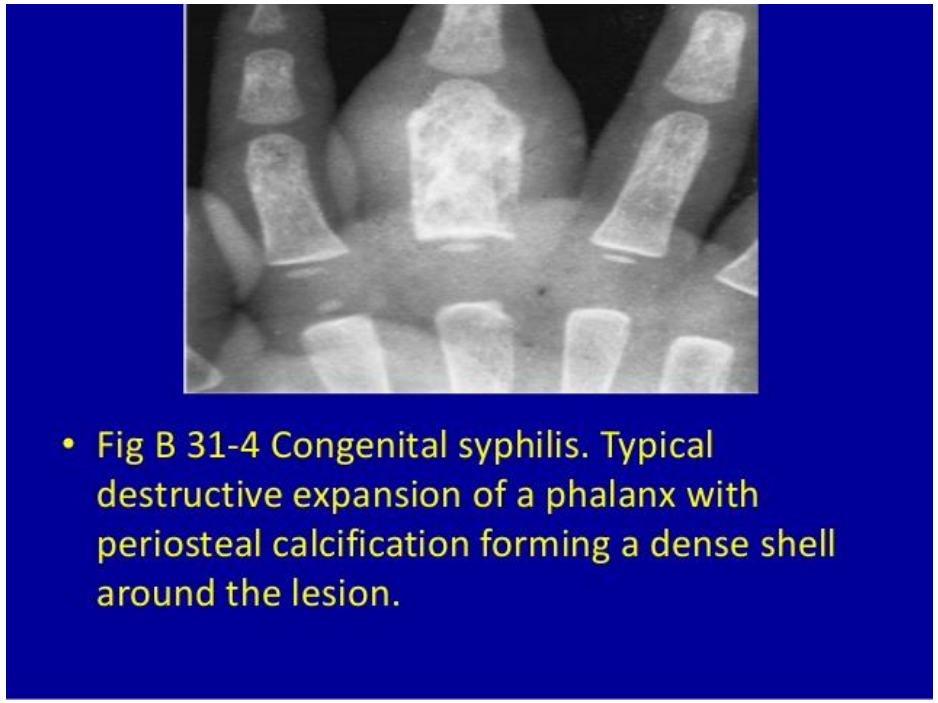
CASE DETAILS: *A 4 years old female child developed a painless swelling on her left index finger two months prior to her presentation. Following an unsuccessful treatment as a case of osteomyelitis with antibiotics, imaging showed an expansile lytic lesion with sclerosis, and fine needle aspiration confirmed tuberculous dactylitis. The child was initiated on anti-tubercular treatment with subsequent marked clinical and radiologic improvement.*

CONCLUSION: *Presence of longstanding finger swelling and pain should alert a clinician to consider active disseminated tuberculosis. Furthermore, proper interpretation of imaging and use of fine needle aspiration has been highlighted.*

KEYWORDS: **Tuberculous dactylitis, Spina ventosa, Expansile lytic lesion, Tuberculosis**

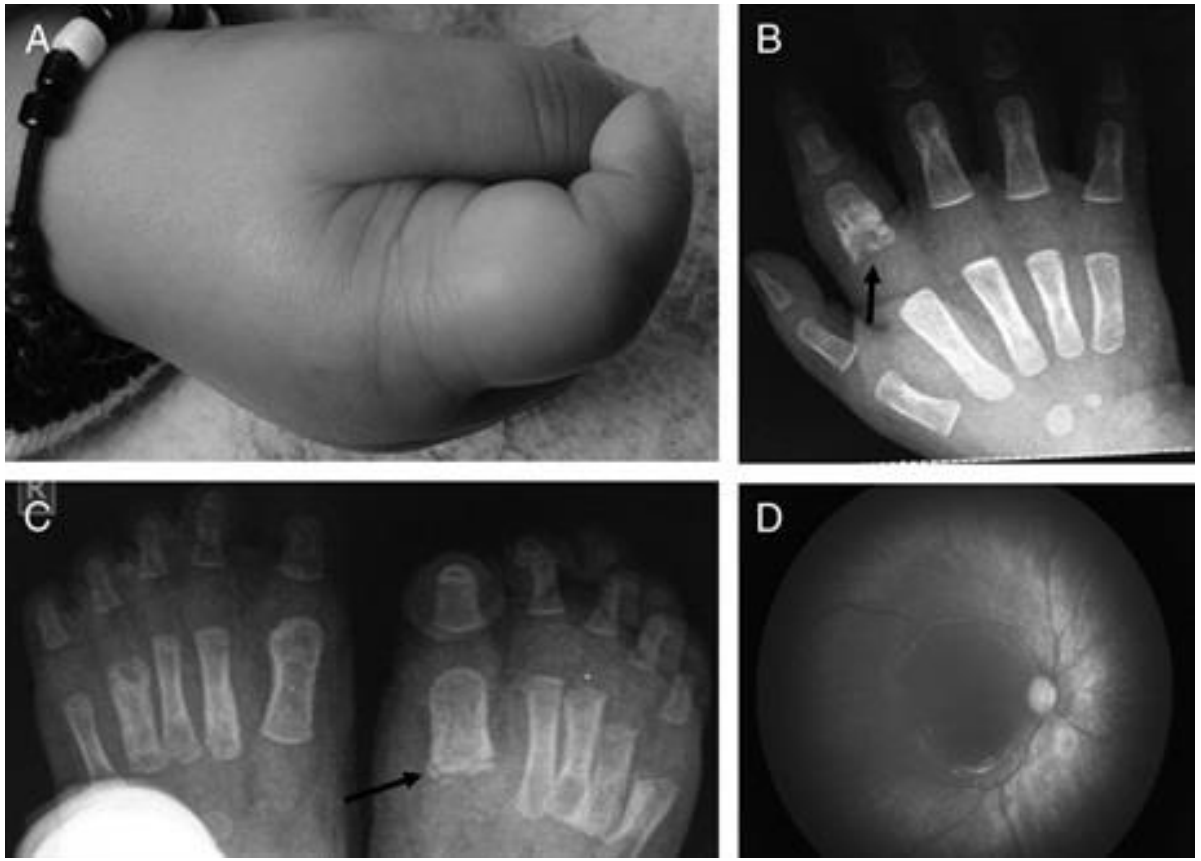
Syphilitic dactylitis

- a manifestation of **congenital** syphilis
- Joints involved : usually bilateral and symmetrical
- Radiological findings mimic those of tuberculous dactylitis but the involvement is **bilateral** and **symmetrical**



- Fig B 31-4 Congenital syphilis. Typical destructive expansion of a phalanx with periosteal calcification forming a dense shell around the lesion.

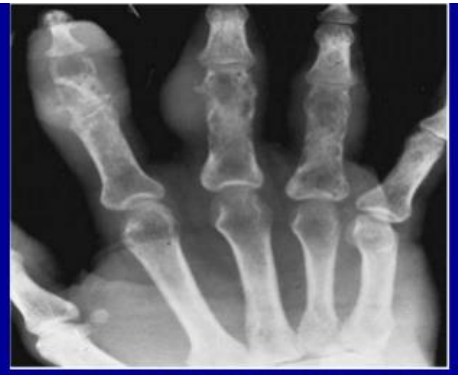
Syphilitic dactylitis



A, Swelling of right index finger (dactylitis). B, Anteroposterior radiograph of hand showing expanded proximal phalanx of right index finger with medullary mottling. C, Anteroposterior radiograph of foot showing expanded first metatarsal bone and lytic lesions in the proximal part. D, Right eye fundus photograph showing pigmentary retinopathy with “salt and pepper” mottling of the retina.

Sarcoid dactylitis

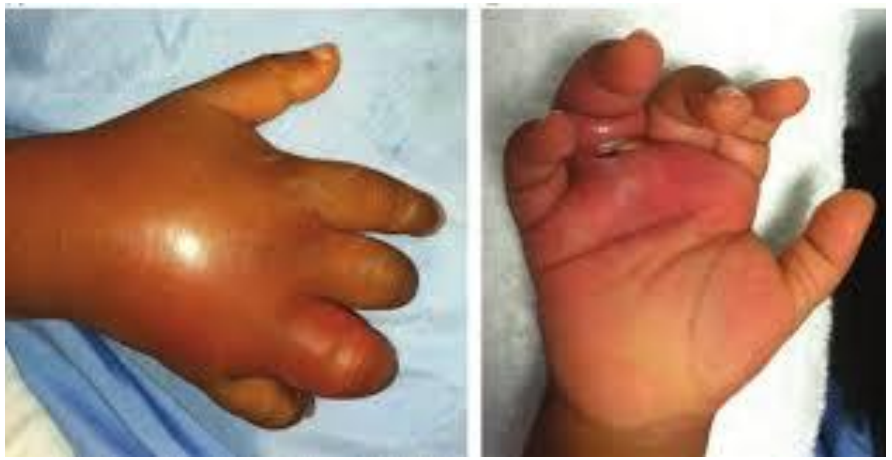
- non-caseating granulomas invading the phalanges and the adjacent soft tissue.



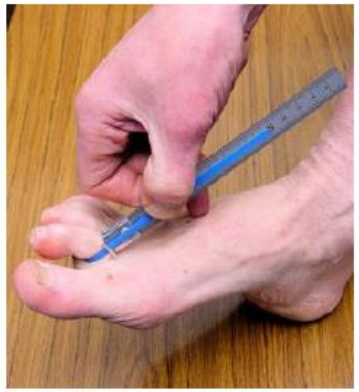
- Fig B 31-5 Sarcoidosis. Destructive changes involving the middle phalanx of the second finger, with soft-tissue swelling about the third proximal interphalangeal joint and cortical thinning and a lacelike trabecular pattern affecting the proximal phalanges of the third and fourth digits.

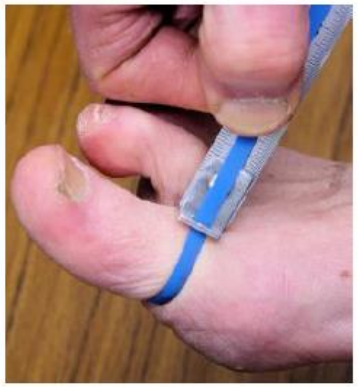
Sickle cell dactylitis

- also known as *'hand-foot syndrome'*
- intermittent vaso-occlusive events and chronic hemolytic anemia
- Causing bone marrow infarction of the carpal and tarsal bones and phalanges.



The Leeds Dactylometer

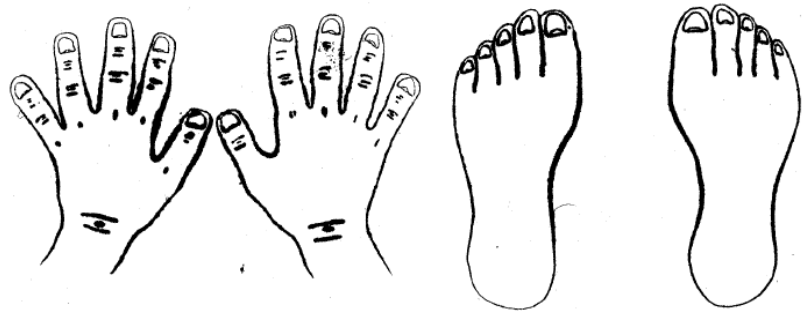




DACTYLITIS SCORE SHEET Version 4, 20th May 2011

Addressograph Label	Date:

Please indicate dactylitic joints



Finger or toe	Circumference involved digit (A)	Circumference contralateral Digit (or Tables) (B)	Tenderness score (C)	Final score: [{(A/B) - 1} x 100] x C

The Leeds Dactylometer

Standard reference: Table - hands

Digit	Men	Women
Thumb	70	58
Index	63	54
Middle	63	54
Ring	59	50
Little	52	44

Table - feet

Digit	Men	Women
Great toe	82	72
Second	52	46
Middle	50	44
Fourth	50	44
Little	52	45

Tenderness score: response to squeeze
0 no tenderness
1 tenderness

Finger or toe	Circumference involved digit (A)	Circumference contralateral Digit (or Tables) (B)	Tenderness score (C)	Final score: [{(A/B) - 1} x 100] x C
TOTAL				

Management of PsA

Recommendation

OPEN ACCESS

EULAR recommendations for the management of psoriatic arthritis with pharmacological therapies: 2019 update

Laure Gossec ,[1,2] Xenofon Baraliakos,[3] Andreas Kerschbaumer ,[4] Maarten de Wit ,[5] Iain McInnes,[6] Maxime Dougados,[7] Jette Primdahl ,[8,9] Dennis G McGonagle,[10,11] Daniel Aletaha,[12] Andra Balanescu,[13] Peter V Balint,[14] Heidi Bertheussen,[15] Wolf-Henning Boehncke,[16] Gerd R Burmester,[17] Juan D Canete ,[18] Nemanja S Damjanov,[19] Tue Wenzel Kragstrup,[20,21] Tore K Kvien,[22] Robert B M Landewé,[23,24] Rik Jozef Urbain Lories,[25,26] Helena Marzo-Ortega,[10,11] Denis Poddubnyy ,[27,28] Santiago Andres Rodrigues Manica ,[29,30] Georg Schett ,[31] Douglas J Veale ,[32] Filip E Van den Bosch,[33] Désirée van der Heijde ,[22,34] Josef S Smolen[35,36]

Ann Rheum Dis: first published as 10.1136/annrheumdis-20

EULAR recommendations for the management of psoriatic arthritis with pharmacological therapies: 2019 update

	Recommendations	Level of evidence	Grade of recommendation
1	Treatment should be aimed at reaching the target of remission or, alternatively, low disease activity, by regular disease activity assessment and appropriate adjustment of therapy.	1b	A
2	Non-steroidal anti-inflammatory drugs may be used to relieve musculoskeletal signs and symptoms.	1b	A
3	Local injections of glucocorticoids should be considered as adjunctive therapy in psoriatic arthritis*; systemic glucocorticoids may be used with caution at the lowest effective dose†.	3b* 4†	C
4	In patients with polyarthritis, a csDMARD should be initiated* rapidly†, with methotrexate preferred in those with relevant skin involvement*.	1b* 5†	B

EULAR recommendations for the management of psoriatic arthritis with pharmacological therapies: 2019 update

5	In patients with monoarthritis or oligoarthritis, particularly with poor prognostic factors such as structural damage, high erythrocyte sedimentation rate/C reactive protein, dactylitis or nail involvement, a csDMARD should be considered.	4	C
6	In patients with peripheral arthritis and an inadequate response to at least one csDMARD, therapy with a bDMARD should be commenced; when there is relevant skin involvement, an IL-17 inhibitor or IL-12/23 inhibitor may be preferred.	1b	B
7	In patients with peripheral arthritis and an inadequate response to at least one csDMARD and at least one bDMARD, or when a bDMARD is not appropriate, a JAK inhibitor may be considered.	1b	B
8	In patients with mild disease* and an inadequate response to at least one csDMARD†, in whom neither a bDMARD nor a JAK inhibitor is appropriate*, a PDE4 inhibitor may be considered.	5* 1b†	B

EULAR recommendations for the management of psoriatic arthritis with pharmacological therapies: 2019 update

9	In patients with unequivocal enthesitis and insufficient response to NSAIDs or local glucocorticoid injections, therapy with a bDMARD should be considered.	1b	B
10	In patients with predominantly axial disease which is active and has insufficient response to NSAIDs, therapy with a bDMARD should be considered, which according to current practice is a TNF inhibitor; when there is relevant skin involvement, IL-17 inhibitor may be preferred.	1b	B
11	In patients who fail to respond adequately to, or are intolerant of a bDMARD, switching to another bDMARD or tsDMARD should be considered*, including one switch within a class†.	1b* 4†	C
12	In patients in sustained remission, cautious tapering of DMARDs may be considered.	4	C

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SPECIAL ARTICLE

2018 American College of Rheumatology/National Psoriasis Foundation Guideline for the Treatment of Psoriatic Arthritis

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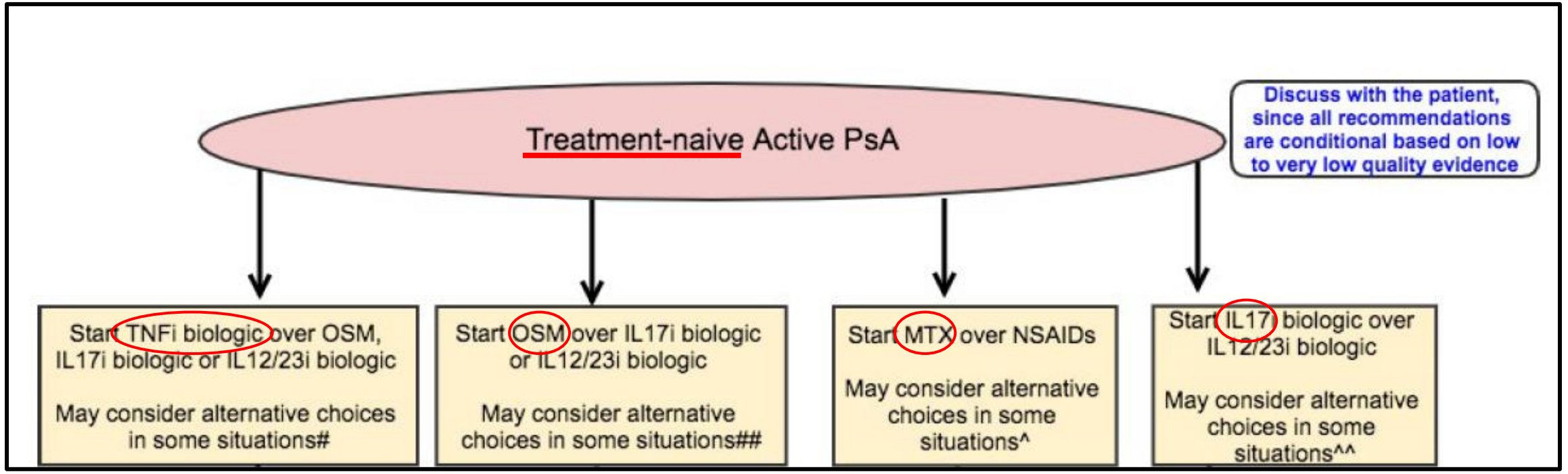
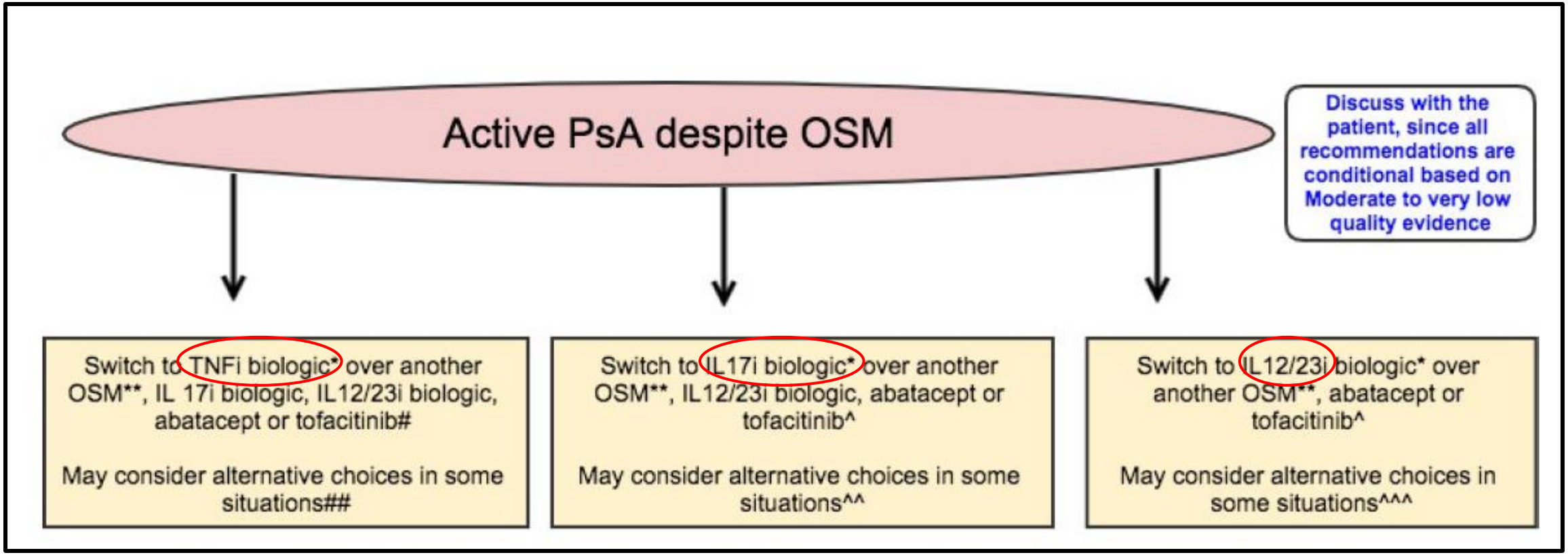
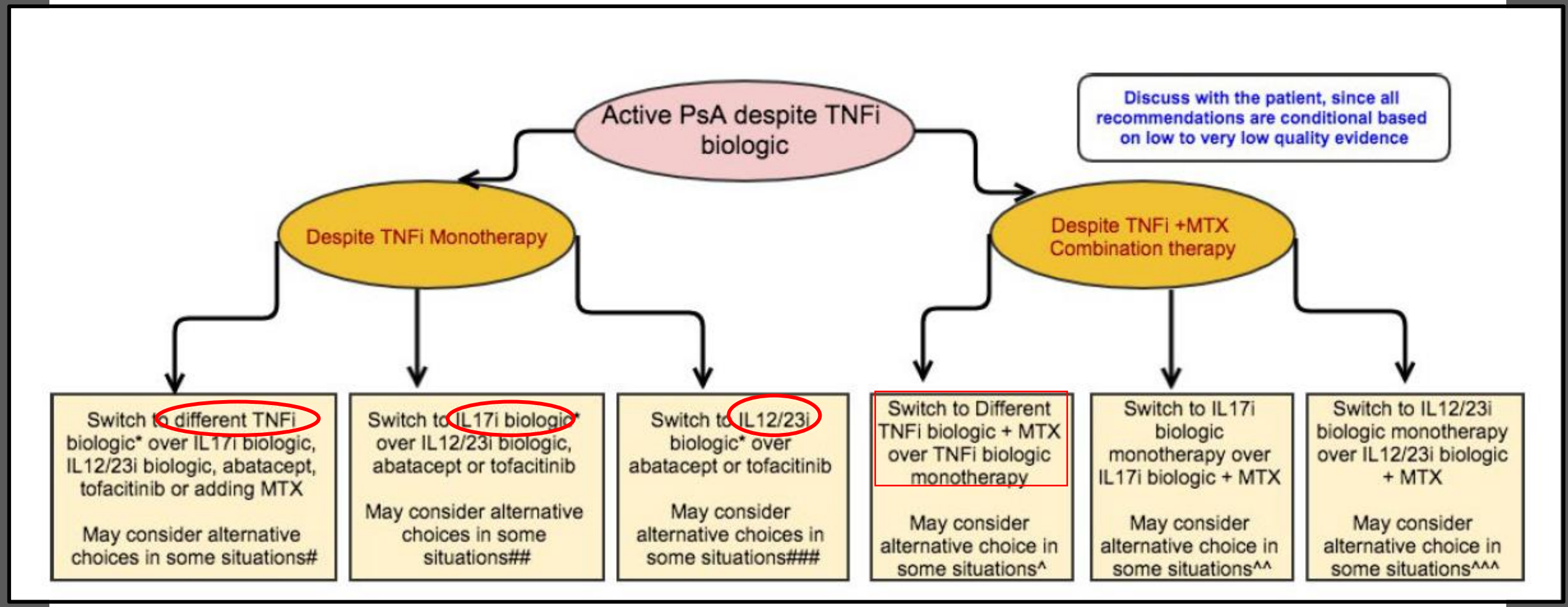
Non-pharmacologic therapies	• physical therapy, occupational therapy, smoking cessation, weight loss, massage therapy, exercise
Symptomatic treatments	• nonsteroidal anti-inflammatory drugs, glucocorticoids, local glucocorticoid injections
OSM	• methotrexate, sulfasalazine, cyclosporine, leflunomide, apremilast
TNFi	• etanercept, infliximab, adalimumab, golimumab, certolizumab pegol
IL12/23i	• ustekinumab
IL17i	• secukinumab, ixekizumab, brodalumab
CTLA4-Ig	• abatacept
JAK inhibitor	• tofacitinib


Treatment-naive Active PsA
Discuss with the patient, since all recommendations are conditional based on low to very low quality evidence
Start TNFi biologic over OSM, IL17i biologic or IL12/23i biologic
May consider alternative choices in some situations#
Start OSM over IL17i biologic or IL12/23i biologic
May consider alternative choices in some situations##
Start MTX over NSAIDs
May consider alternative choices in some situations^
Start IL17i biologic over IL12/23i biologic
May consider alternative choices in some situations^^


Active PsA despite OSM
Discuss with the patient, since all recommendations are conditional based on Moderate to very low quality evidence
Switch to TNFi biologic* over another OSM**, IL 17i biologic, IL12/23i biologic, abatacept or tofacitinib#
May consider alternative choices in some situations##
Switch to IL17i biologic* over another OSM**, IL12/23i biologic, abatacept or tofacitinib^
May consider alternative choices in some situations^^
Switch to IL12/23i biologic* over another OSM**, abatacept or tofacitinib^
May consider alternative choices in some situations^^^


Active PsA despite TNFi biologic
Discuss with the patient, since all recommendations are conditional based on low to very low quality evidence
Despite TNFi Monotherapy
Despite TNFi +MTX Combination therapy
Switch to different TNFi biologic* over IL17i biologic, IL12/23i biologic, abatacept, tofacitinib or adding MTX
May consider alternative choices in some situations#
Switch to IL17i biologic* over IL12/23i biologic, abatacept or tofacitinib
May consider alternative choices in some situations##
Switch to IL12/23i biologic* over abatacept or tofacitinib
May consider alternative choices in some situations###
Switch to Different TNFi biologic + MTX over TNFi biologic monotherapy
May consider alternative choice in some situations^
Switch to IL17i biologic monotherapy over IL17i biologic + MTX
May consider alternative choice in some situations^^
Switch to IL12/23i biologic monotherapy over IL12/23i biologic + MTX
May consider alternative choice in some situations^^^

Conclusion

This patient has persistent digital swellings despite treatment with Febuxostat and Secukinumab..

So what is this swelling? ..

Based on the MRI, it does not show features of active dactylitis

Tophaceous gout could cause tenosynovitis too…


THANK
YOU