



Understanding the pathology of enthesopathy

The need for collaboration in diagnosing and treating the condition



ROYAL COLLEGE
of PODIATRY

Conference November 2024

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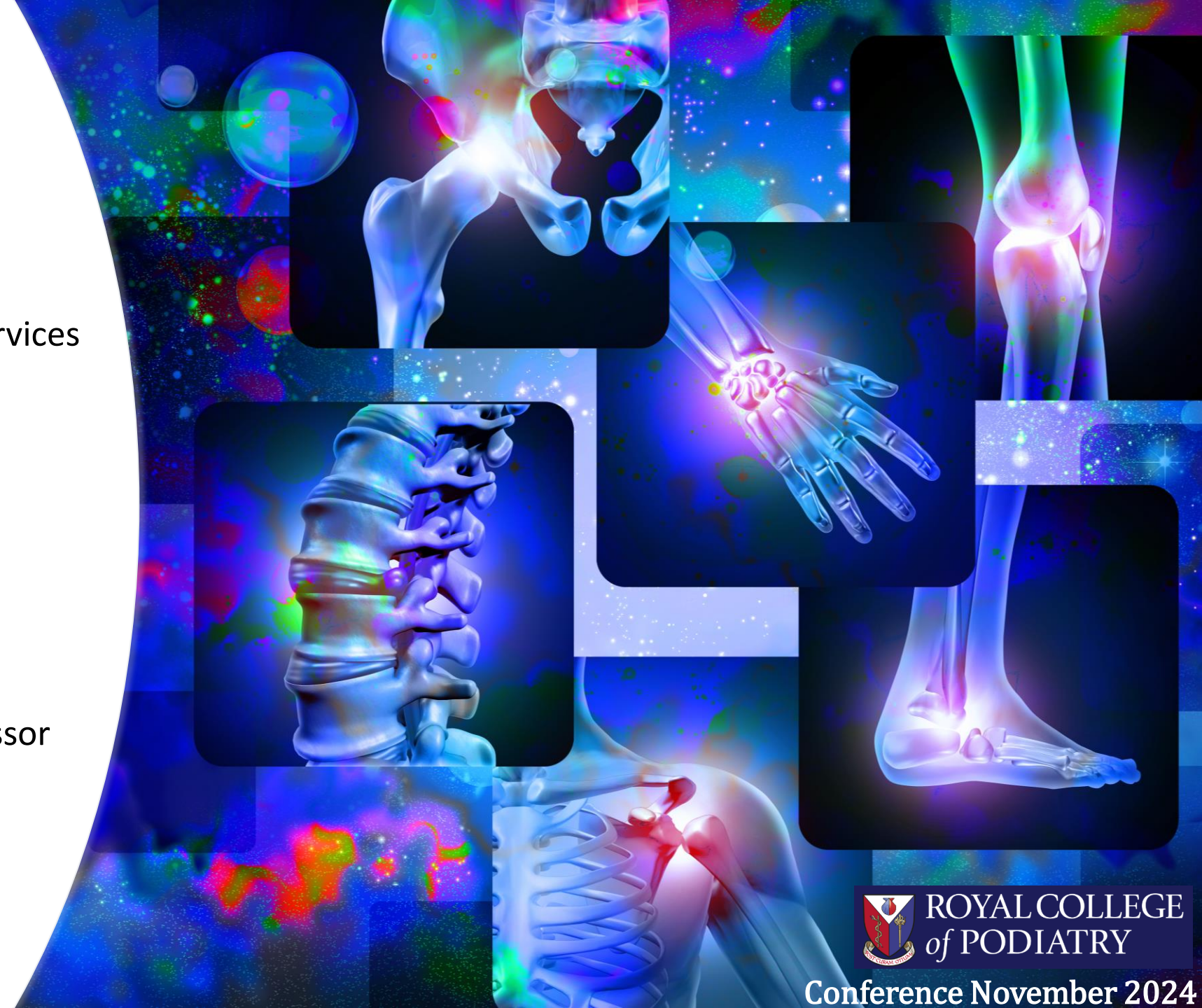
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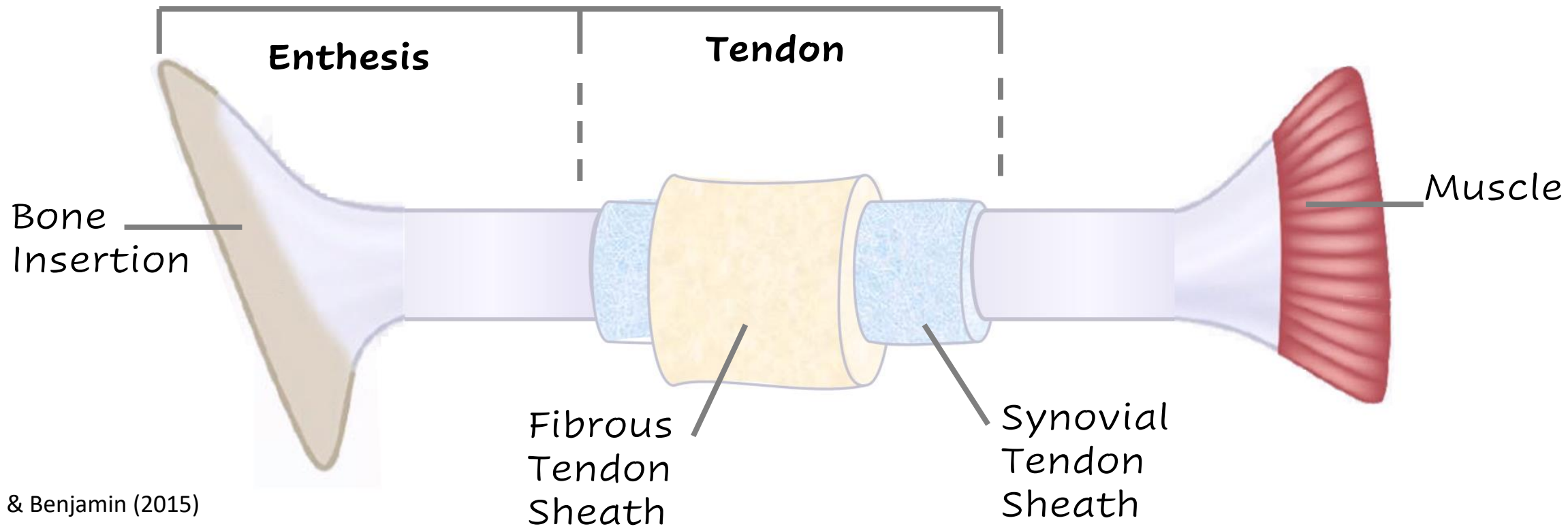
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Introduction

Entheses, enthesitis and enthesopathy

The entheses are the insertion sites where ligaments, tendons, fascia or articular capsules enter the bone surface.

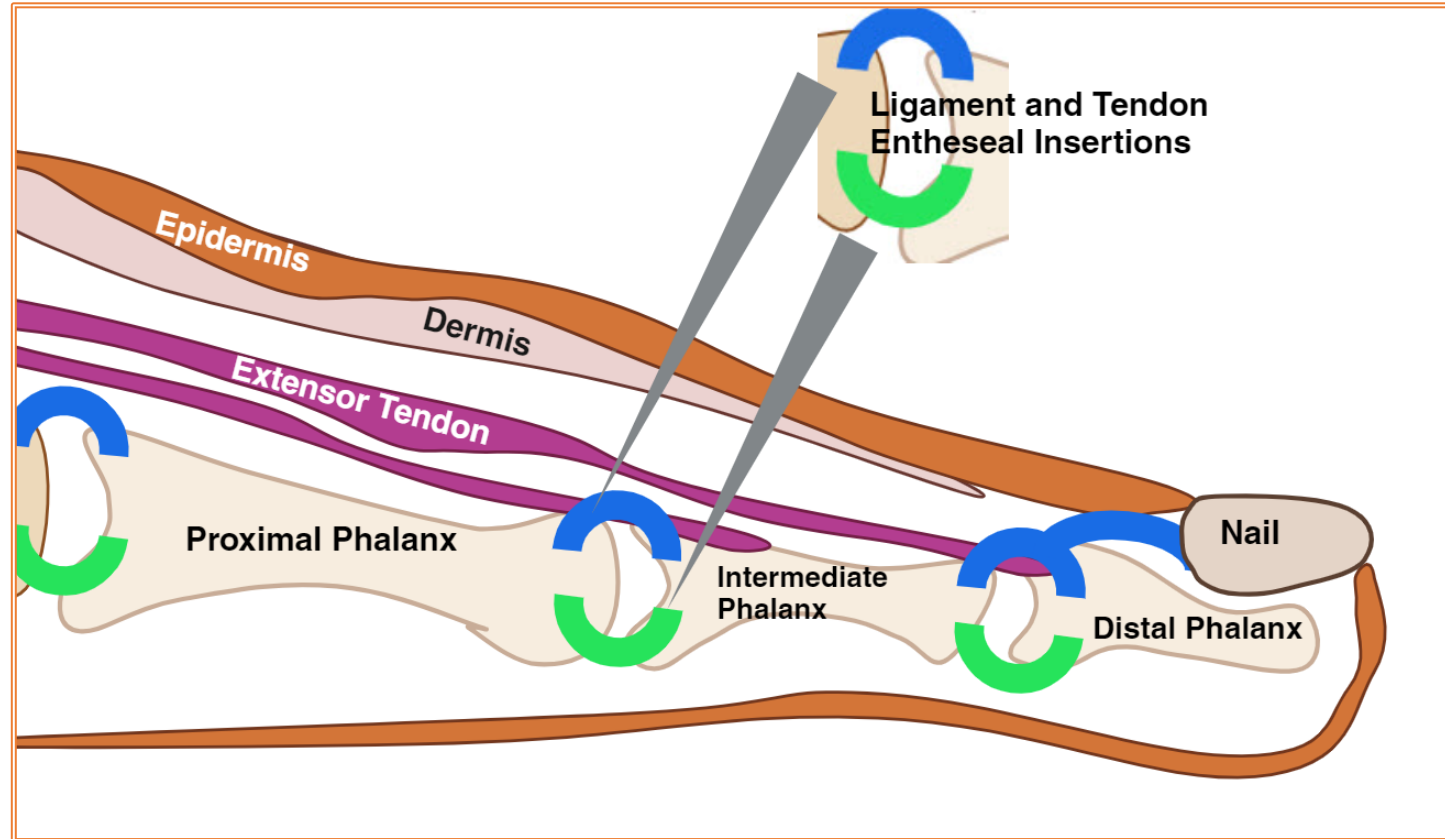


Introduction

Entheses, enthesitis and enthesopathy

Inflammation of the entheses (enthesitis) is a key feature and an early inflammatory change of psoriatic arthritis and spondyloarthritis

Enthesitis is frequently found in the distal extremities



Psoriasis



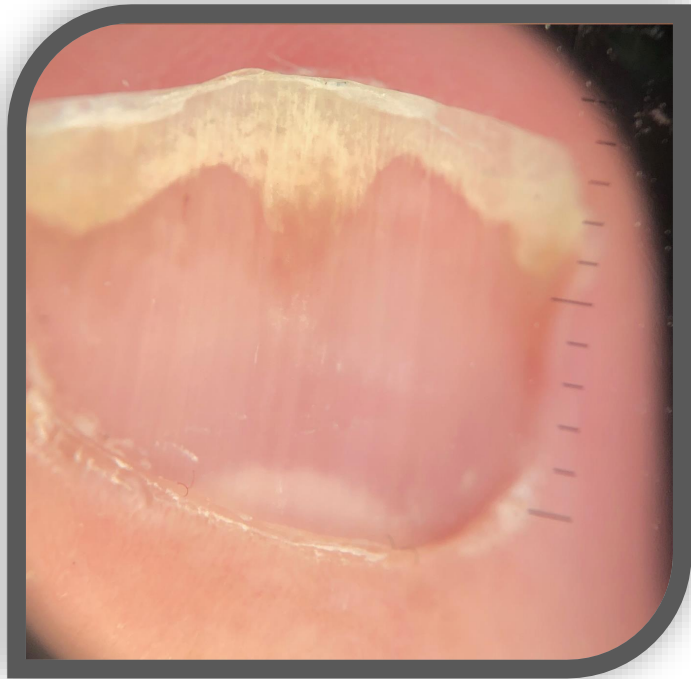
- Psoriasis is a chronic, inflammatory disorder affecting the skin, scalp, nails, flexures and joints
- Linked to poor quality of life, physical disability and psychological distress

Psoriasis

- Clinical presentation of plaque psoriasis involves well demarcated silver and erythematous scaling plaques, particularly on extensor surfaces
- Plaque Psoriasis is just one of seven different types of psoriasis



Types of Psoriasis



Nail changes can be seen in all forms of psoriasis

Plaque Psoriasis

Scalp Psoriasis

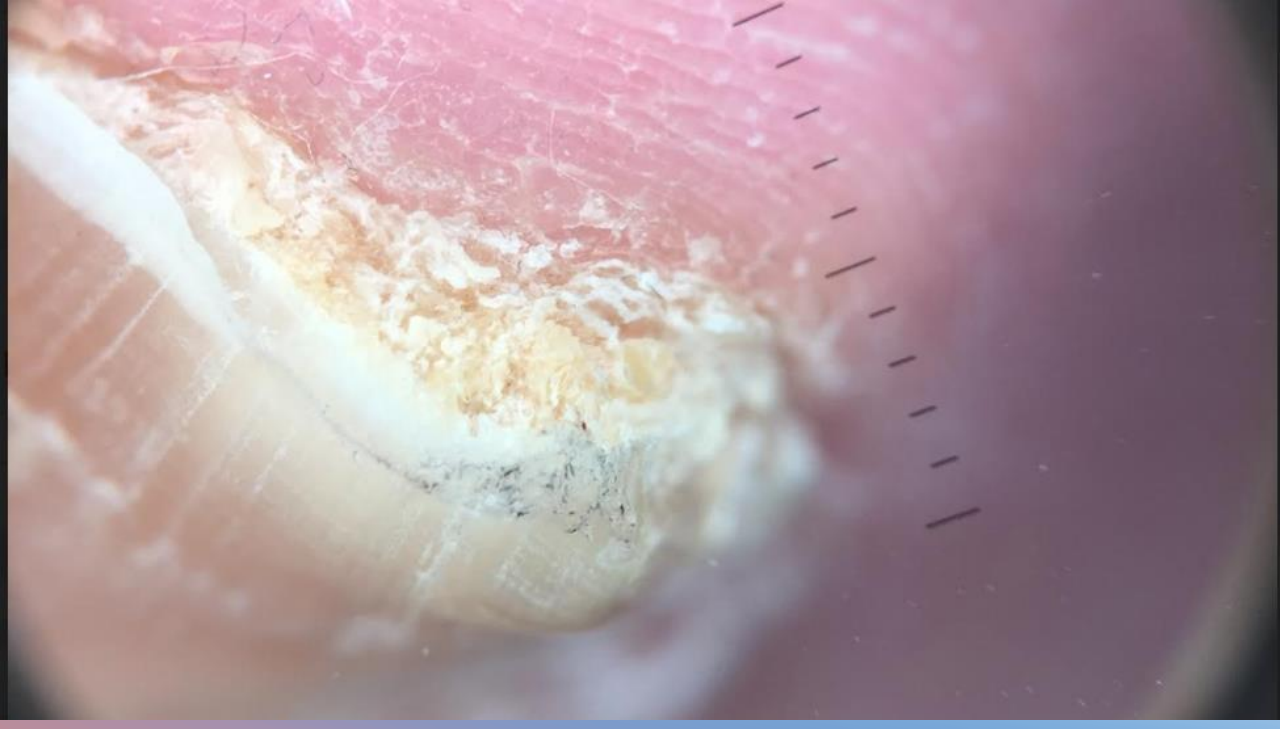
Guttate Psoriasis

Nail Psoriasis

Inverse / Flexural Psoriasis

Palmer Plantar Pustular Psoriasis

Erythrodermic Psoriasis



Nail Psoriasis

Within the nail unit, psoriasis manifests differently based on whether psoriatic inflammation is occurring in either the nail matrix and/or the nail bed

Nail Psoriasis is a major predictor for the development of psoriatic arthritis

- [8] Dessai, P., Del Rosso, J. and Lebwohl, (2019)

Key Point 1

The skin and nail lesions seen in Psoriasis precede the articular symptoms and joint disease seen in Psoriatic Arthritis, in more than 75% of patients.



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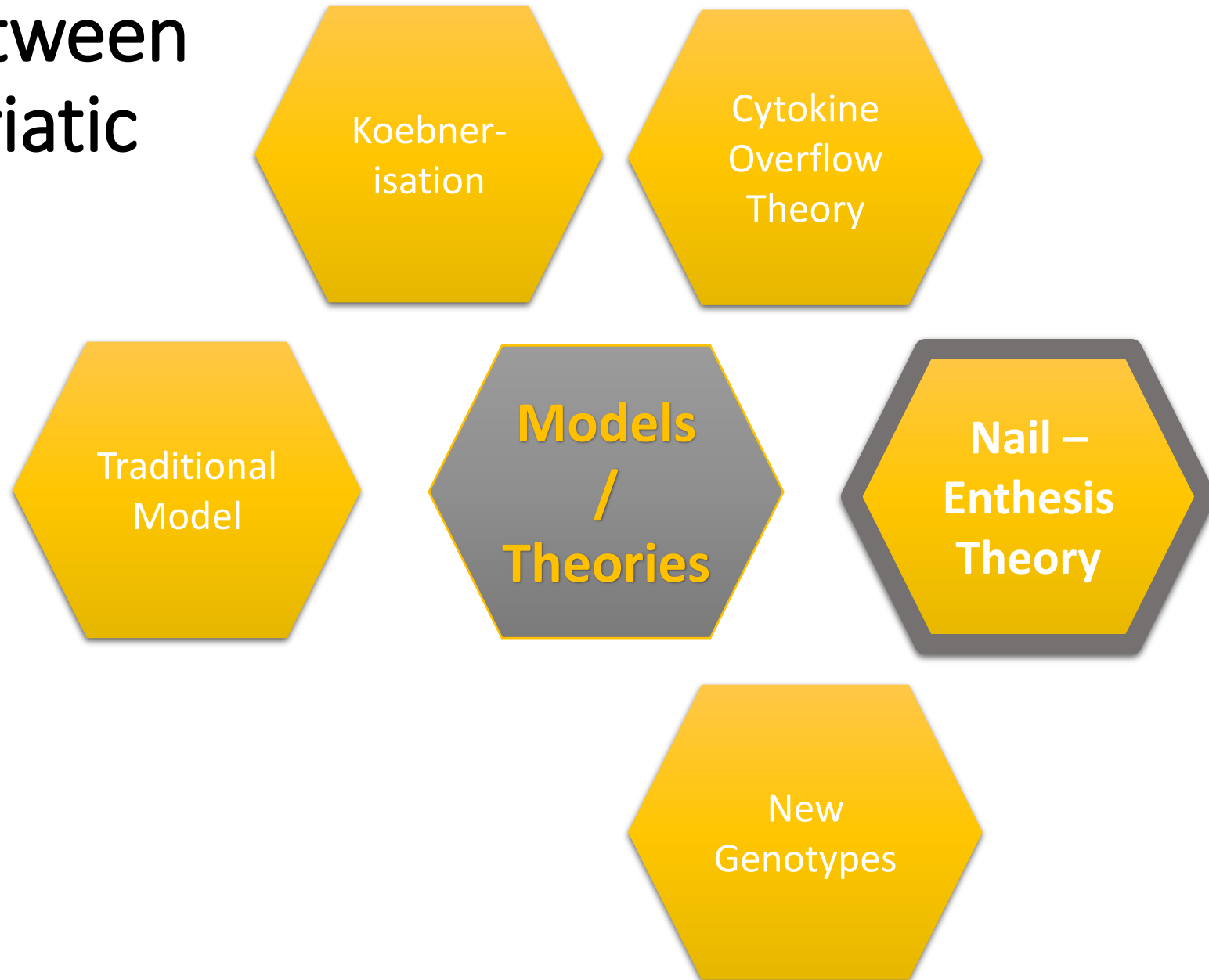
Podiatrists and dermatologists can play a key role in the early detection and management of psoriatic arthritis and help to reduce degenerative joint disease.

[9] Raposo & Torres (2015), [10] Liu et al. (2020)

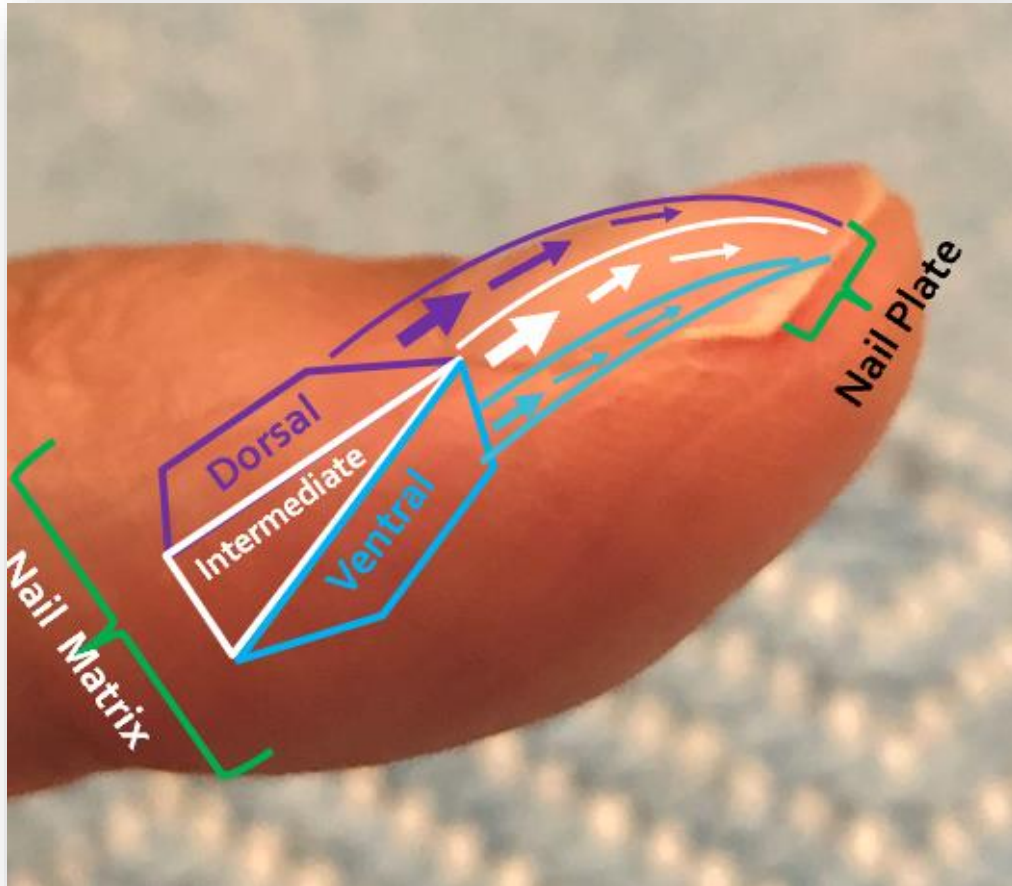


Why is there a link between nail psoriasis and psoriatic arthritis?

- Nail psoriasis and its links to psoriatic arthritis are not fully understood
- Research has hypothesised several theories



Psoriatic Nail Lesions of the Nail Matrix



Pitting

Leukonychia

Red spots in lunula

Onychorrhexis

(longitudinal nail ridge, split, or fissure)

Beau lines (transverse lines and ridges)

Nail crumbling

Psoriatic Nail Lesions of the Nail Matrix

Pitting



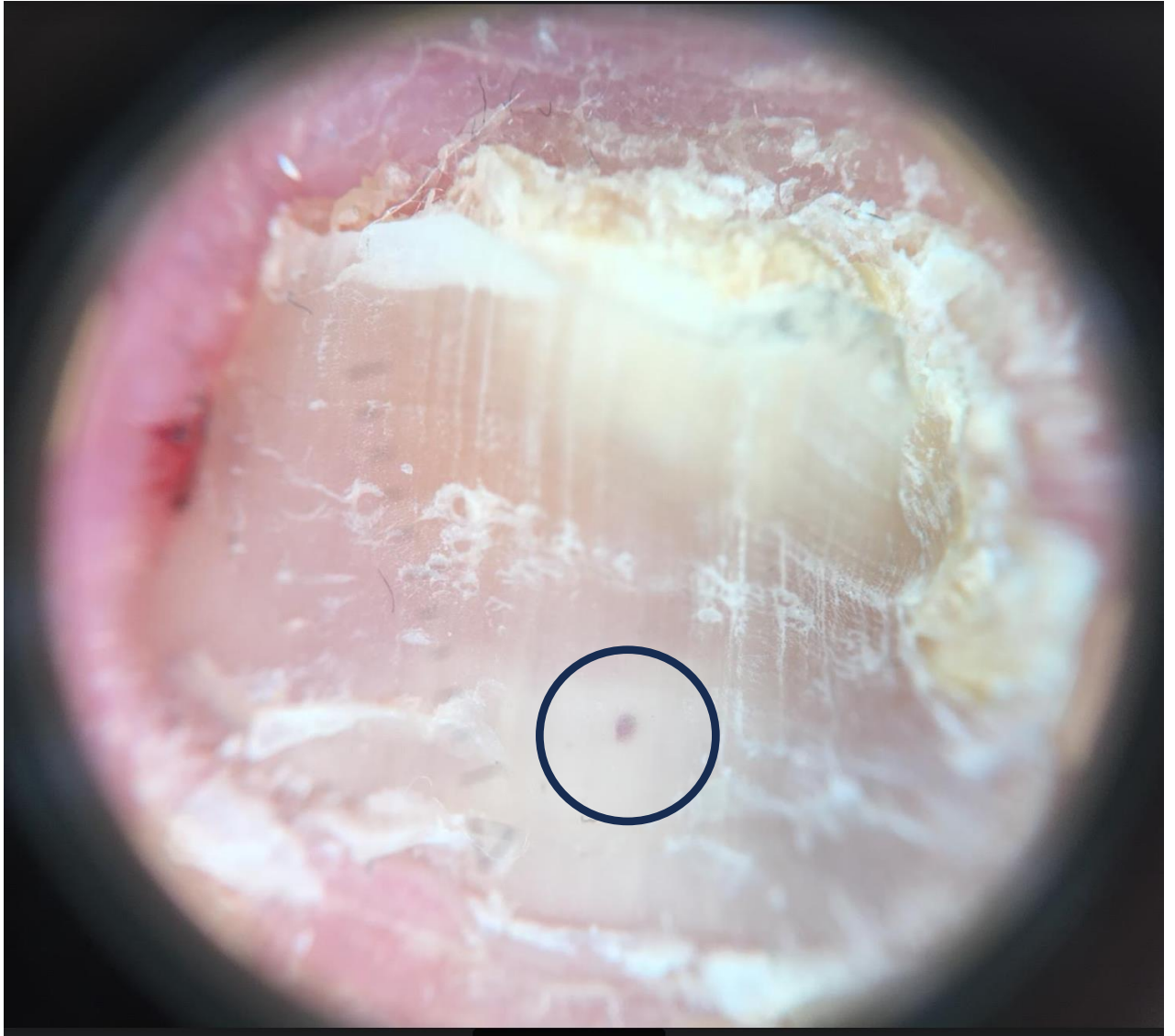
Leukonychia



Psoriatic Nail Lesions of the Nail Matrix



Red spots in lunula



Psoriatic Nail Lesions of the Nail Bed

Onycholysis

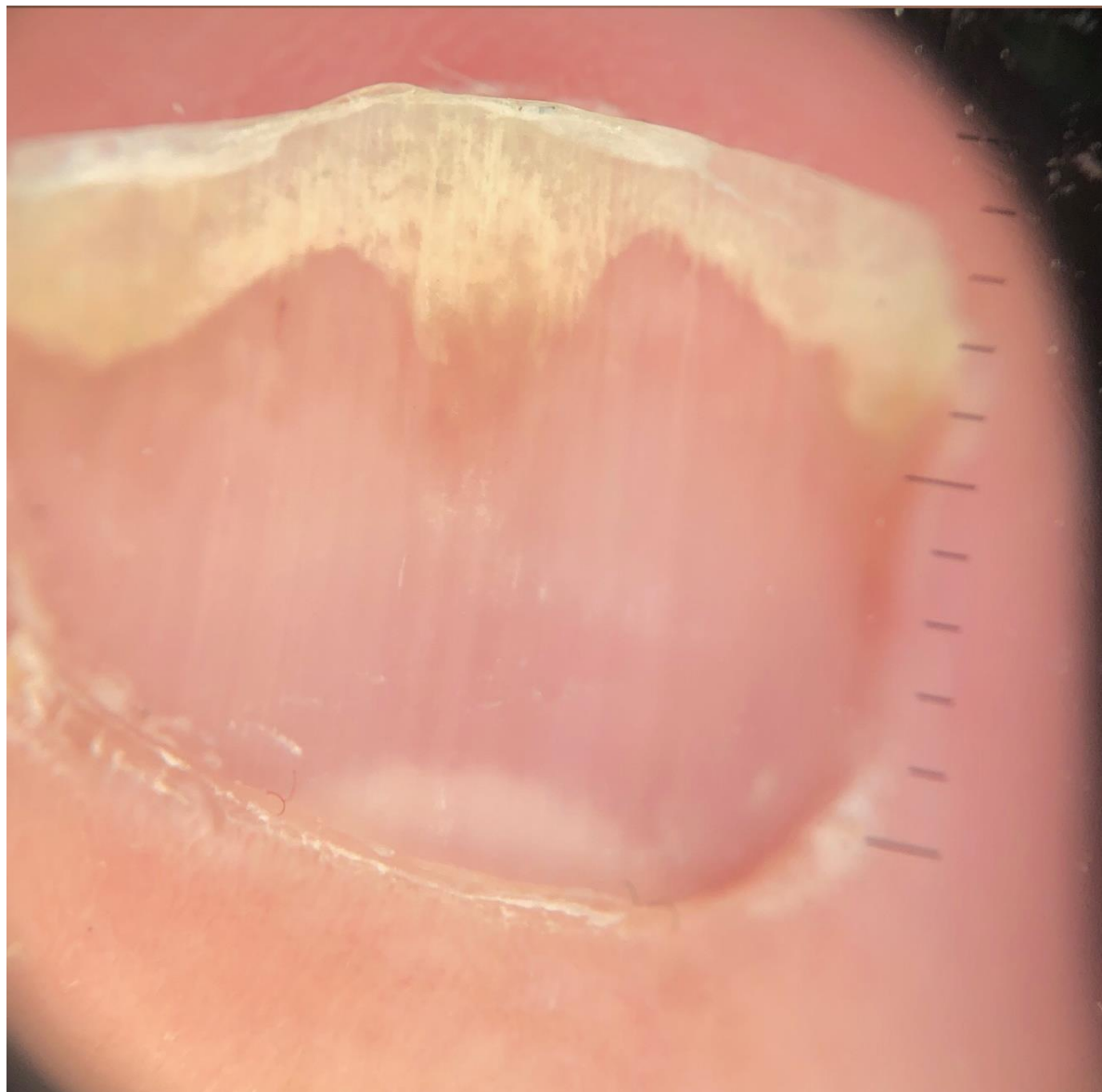
Oil drop or salmon patch signs

Subungual hyperkeratosis

Splinter haemorrhages

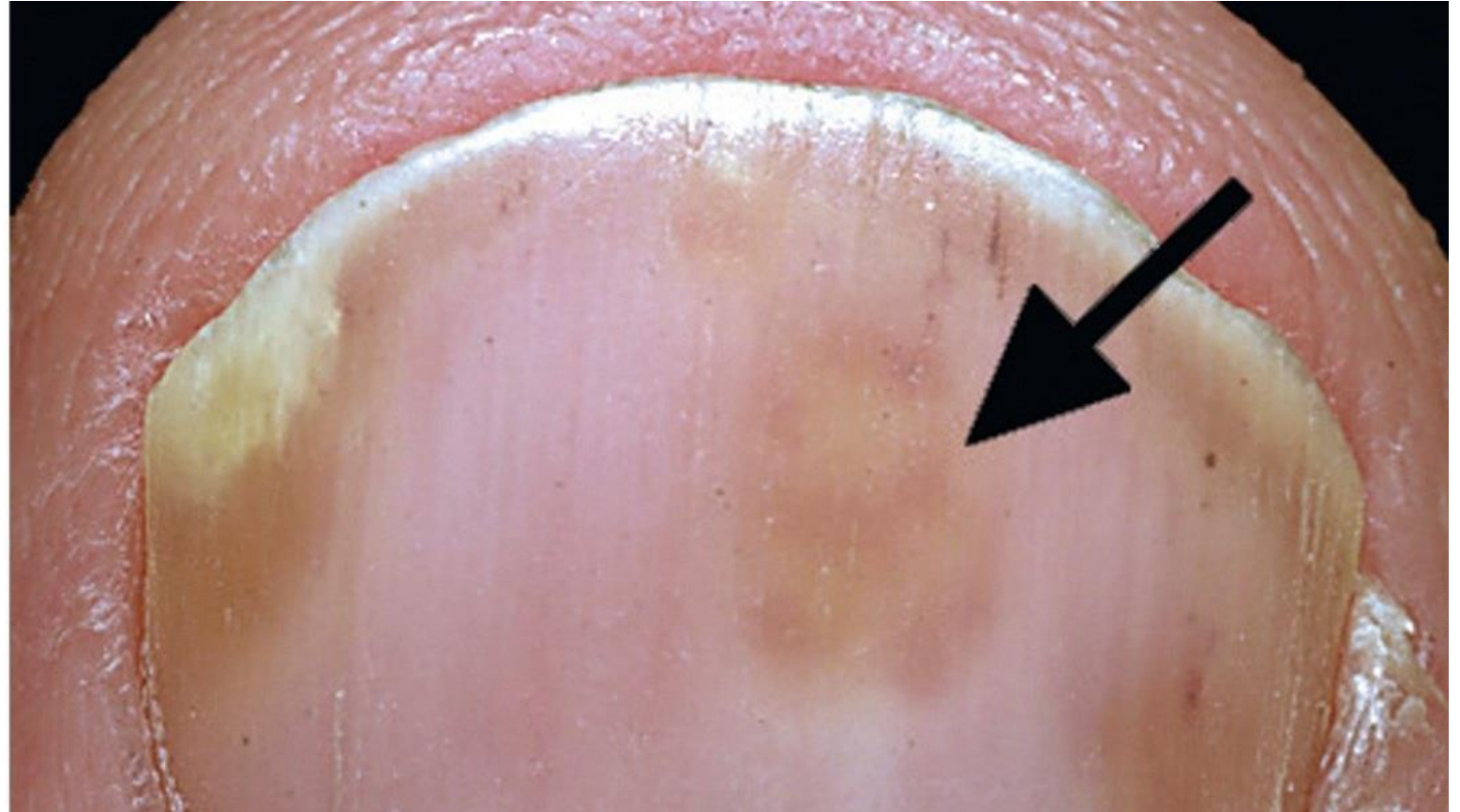
Onycholysis

Psoriatic Nail Lesions of the Nail Bed



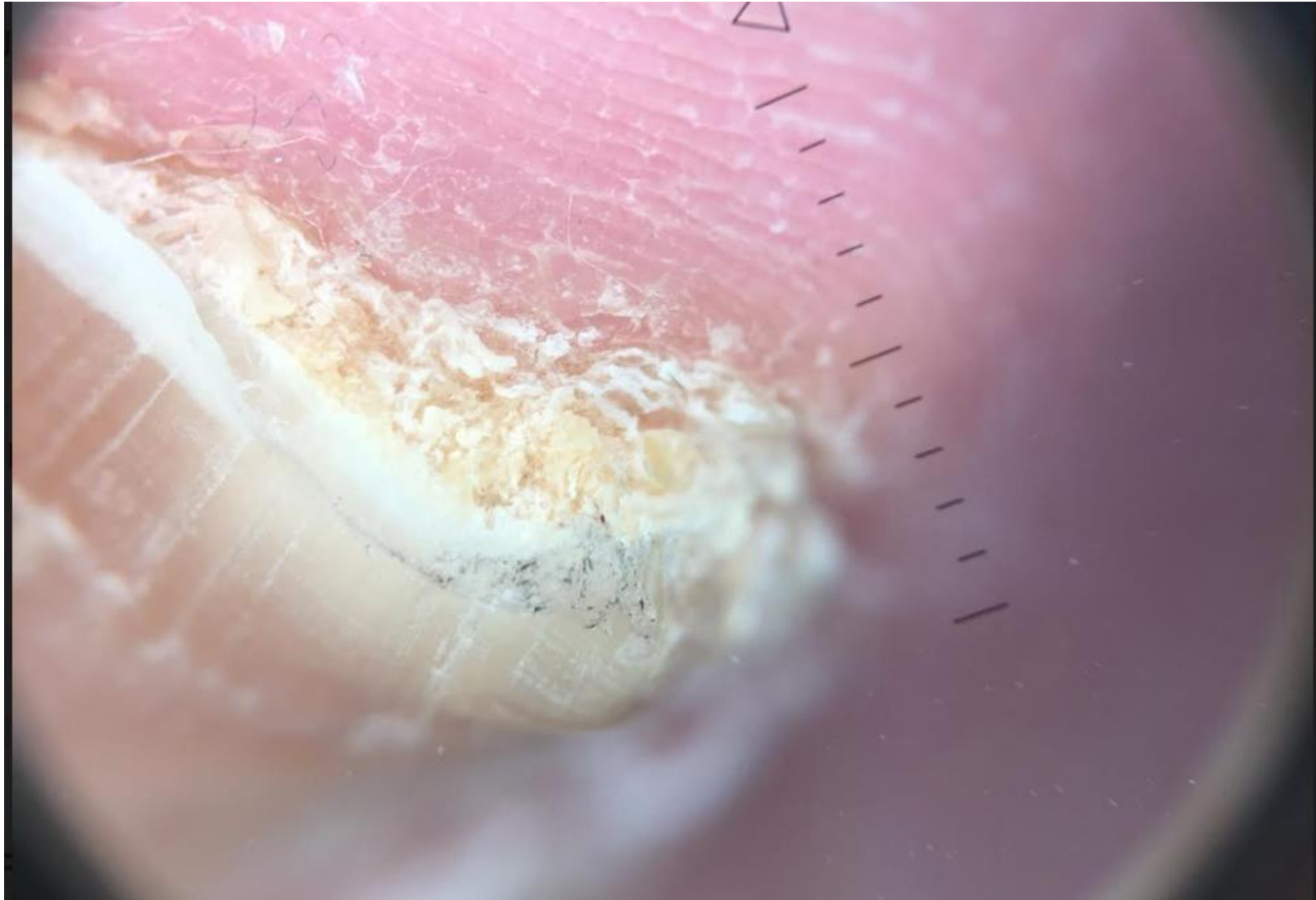
Psoriatic Nail Lesions of the Nail Bed

Oil drop or salmon patch signs



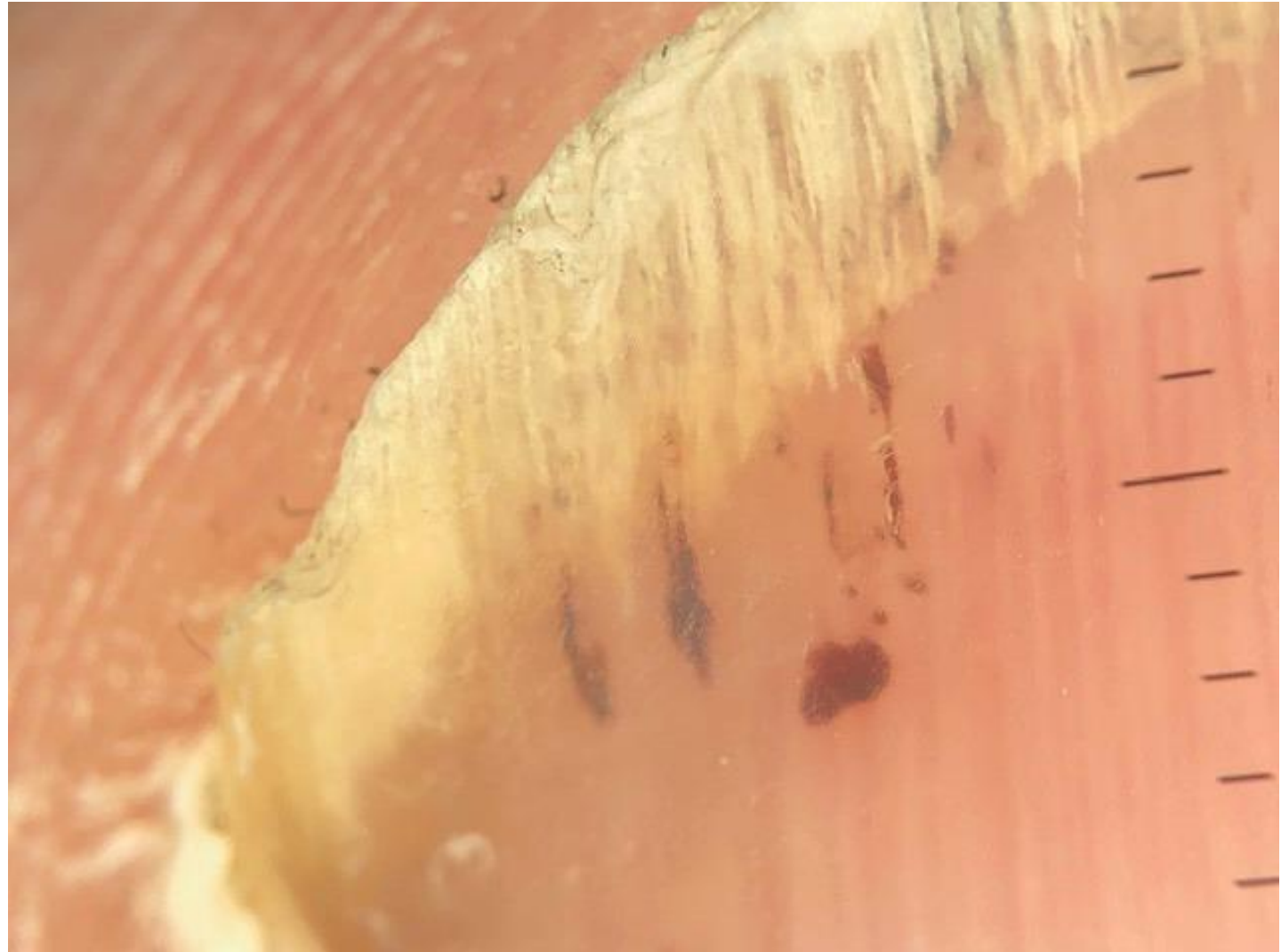
Psoriatic Nail Lesions of the Nail Bed

Subungual hyperkeratosis



Psoriatic Nail Lesions of the Nail Bed

Splinter haemorrhages



Psoriatic Arthritis Assessment - PEST

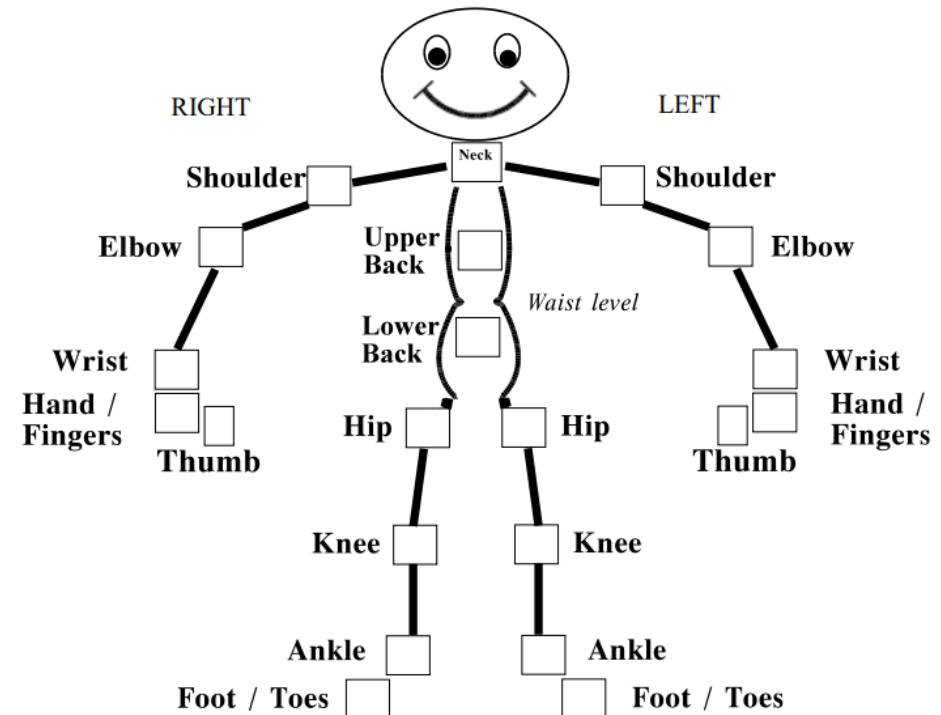
- Where psoriatic nail features are identified in a patient who does not already have a diagnosis of Psoriatic Arthritis (PsA) complete an annual Psoriasis Epidemiology Screening Tool (PEST) assessment.
- A simple screening questionnaire consisting of five questions to help identify cases of PsA.
- Referral to a Rheumatologist should be considered with a score of 3 or more out of 5.

PSORIASIS EPIDEMIOLOGY SCREENING TOOL (PEST)

PATIENT NAME
 DOB
 DATE OF VISIT

	YES	NO
Have you ever had a swollen joint (or joints)?		
Has a doctor ever told you that you have arthritis?		
Do your finger nails or toe nails have holes or pits?		
Have you had pain in your heel?		
Have you had a finger or toe that was completely swollen and painful for no apparent reason?		
TOTAL PEST SCORE		

In the drawing below, please tick the joints that have caused you discomfort (i.e. stiff, swollen or painful joints).



Key Message

SEE this



Complete PEST

PEST (Physical Examination of Swollen Toes) form:

PATIENT NAME:
JOB:
DATE OF VISIT:

	YES	NO
Have you ever had a swollen joint (or joints)?		
Has a doctor ever told you that you have arthritis?		
Do your finger nails or toe nails have holes or pits?		
Have you had pain in your heel?		
Have you had a finger or toe that was completely swollen and painful for no apparent reason?		
TOTAL PEST SCORE		

On the drawing below, please tick the joints that have caused you discomfort (i.e. stiff, swollen or painful joints).

PREVENT this



Key Message

SEE this



Complete PEST

PATIENT NAME
 JOB
 DATE OF VISIT

	YES	NO
Have you ever had a swollen joint (or joints)?		
Has a doctor ever told you that you have arthritis?		
Do your finger nails or toe nails have holes or pits?		
Have you had pain in your heel?		
Have you had a finger or toe that was completely swollen and painful for no apparent reason?		
TOTAL PEST SCORE		

On the drawing below, please tick the joints that have caused you discomfort (i.e. stiff, swollen or painful joints).

PREVENT this



References

- [1] McGonagle, M. and Benjamin, M. (2015) '123 – Enthesopathies' in Hochberg, M. et al. (ed.) Rheumatology (sixth edition), Mosby, pp.1014. Available at: <https://www.sciencedirect.com/science/article/abs/pii/B9780323091381001236> Accessed 31 October 2023
- [2] Alvarez A. and Tiu, T. (2023) Enthesopathies. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK559030/> Accessed: 31 October 2023.
- [3] Kehl, A., Corr, M. and Weisman, M. (2016) Review: Enthesitis: New Insights Into Pathogenesis, Diagnostic Modalities, and Treatment. Arthritis Rheumatol. 68(2) pp.312-22. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5195265/> Accessed: 31 October 2023
- [4] PCDS (2019) Psoriasis Primary Care Treatment Pathway. Available at: https://www.pcds.org.uk/files/general/Psoriasis_Treatment_2019-web.pdf Accessed: 31 October 2023
- [5] Bhosle, M., Kulkarni, A., Feldman, S. and Balkrishnan, R. (2006) Quality of life in patients with psoriasis. Health Qual Life Outcomes, 6;4:35 Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1501000/> Accessed: 31 October 2023
- [6] NHS (2022) Symptoms Psoriasis. Available at: <https://www.nhs.uk/conditions/psoriasis/symptoms/>. Accessed: 08 November 2023.
- [7] [24] Dessai, P., Del Rosso, J. and Lebwohl, (2019) Clinical Manifestations and Management Considerations of Psoriasis Affecting The Nail Unit. Skin, 3(1), pp. 13-27. Available at: <https://jofskin.org/index.php/skin/article/view/64> Accessed: 05 January 2023.
- [8] Raposo, I. and Torres, T. (2015) Nail psoriasis as a predictor of the development of psoriatic arthritis. Actas Dermo-Sifiliográficas, 106 (6), pp. 452-457. Available at: <https://www.actasdermo.org/index.php?p=revista&tipo=pdf-simple&pii=S000173101500143X#:~:text=Since%20skin%20lesions%20precede%20articular,early%20diagnosis%20and%20management%20PsA>. Accessed 31 October 2023
- [9] Raposo, I. and Torres, T. (2015) Nail psoriasis as a praictor of the development of psoriatic arthritis. Actas Dermo-Sifiliográficas, 106 (6), pp. 452-457 Available at: <https://www.actasdermo.org/index.php?p=revista&tipo=pdf-simple&pii=S000173101500143X#:~:text=Since%20skin%20lesions%20precede%20articular,early%20diagnosis%20and%20management%20PsA>. Accessed 31 October 2023
- [10] Liu, R., Candela, B. and English, J. (2020) Nail Psoriasis and Psoriatic Arthritis for the Dermatologist, Journal of Dermatology and Skin Science, 2(1), pp. 17-21. Available at: <https://www.dermatoljournal.com/articles/nail-psoriasis-and-psoriatic-arthritis-for-the-dermatologist-1-1106.pdf> Accessed: 05 January 2023.
- [11] Pasch, M. and Lorizzo, M. (2021) Latest Research in Nail Psoriasis. In Baran, R. (Ed.) Advances in Nail Disease and Management, Updates in Clinical Dermatology, Springer Nature, Switzerland. Accessed 31 October 2023.
- [12] Kaeley, G., Eder, L., Aydin, S., Rich, P. and Bakewell, C. (2021) Nail Psoriasis: Diagnosis, Assessment, Treatment Options, and Unmet Clinical Needs. J Rheumatol. 48(8) pp.1208-1220. doi: 10.3899/jrheum.201471. Epub 2021 Feb 15. PMID: 33589557. Accessed 31 October 2023.
- [13] McGonagle, D., Tan, A. and Benjamin, M. (2019) The nail as a musculoskeletal appendage--implications for an improved understanding of the link between psoriasis and arthritis. Dermatology. 218(2) pp.97-102. Available at: <https://pubmed.ncbi.nlm.nih.gov/19060455/> Accessed: 01 November 2023
- [14] NICE (2023) How should I assess a person with suspected psoriasis? Available at: <https://cks.nice.org.uk/topics/psoriasis/diagnosis/assessment/> Accessed: 01 November 2023