Fig 1. [^{18}F]Fluoride uptake in the cervical, thoracic and lumbar spine in a clinically active AS patient (A) and in the patella tendon of the right knee in a clinically active PsA patient (B)

Conclusion: [^{18}F]Fluoride PET uptake, reflecting new bone formation, can be visualized at heterogeneously distributed entheses and (peri-)articular sites in AS- and PsA patients. The technique therefore is sensitive to visualize new bone formation and may reflect local disease activity. Additional scans will be collected and analyzed quantitatively, also after anti-TNF or Secukinumab treatment, to further investigate the applicability of [^{18}F]Fluoride PET for monitoring of therapeutic effects on bone formation in SpA.

References:

- [1] Maksymowych WP, Mallon C, Morrow S, Shojania K, Olszynski WP, Wong RL, et al. Development and validation of the Spondyloarthritis Research Consortium of Canada (SPARCC) Enthesitis Index. *Ann Rheum Dis*. 2009;68(6):948-53.
- [2] Rezvani A, Bodur H, Ataman S, Kaya T, Bugdayci DS, Demir SE, et al. Correlations among enthesitis, clinical, radiographic and quality of life parameters in patients with ankylosing spondylitis. *Mod Rheumatol*. 2014;24(4):651-6.
- [3] Rudwaleit M, Khan MA, Sieper J. The challenge of diagnosis and classification in early ankylosing spondylitis: do we need new criteria? *Arthritis Rheum*. 2005;52:1000-8.
- [4] Bruijnen ST, Verweij NJF, van Duivenvoorde L, Bravenboer N, Baeten D, van Denderen JC, et al. [^{18}F]Fluoride PET-CT imaging of bone formation in ankylosing spondylitis before and after 12 weeks of anti-TNF treatment. 2017.

Acknowledgments: We thank EULAR Forum, Pfizer and Novartis for financial support of this investigator initiated study.

Disclosure of Interests: Jerney de Jongh: None declared, Robert Hemke: None declared, Gerben C.J. Zwezerijnen: None declared, Maqsood Yaqub: None declared, Irene van der Horst-Bruinsma Grant/research support from: AbbVie, Novartis, Eli Lilly, Bristol-Myers Squibb, MSD, Pfizer, UCB Pharma, Consultant of: AbbVie, Novartis, Eli Lilly, Bristol-Myers Squibb, MSD, Pfizer, UCB Pharma, Marleen G.H. van de Sande Grant/research support from: Novartis, Eli Lilly, UCB, Jansen, Consultant of: AbbVie, Novartis, Eli Lilly, MSD, Arno Van Kuijk: None declared, Irene Bultink: None declared, Lot Burgemeister: None declared, Nancy M.A. van Dillen: None declared, Alexandre Voskuyl: None declared, Conny J. van der Laken: None declared

DOI: 10.1136/annrheumdis-2020-eular.4216

AB1088

NAIL PSORIASIS: THE UNDERESTIMATED DISORDER IN PSORIASIS AND PSORIASIS ARTHRITIS. CAN ULTRASOUND AND CAPILLARY MICROSCOPY IN PATIENTS WITH NAIL PSORIASIS SPEED UP OUR DIAGNOSIS AND THERAPY?

B. C. Dettler¹, S. El-Nawab-Becker², M. Toellner¹, A. Kleinheinz², T. Witte⁴.

¹Clinic Dr. Hancken GmbH, Stade, Germany; ²Rheumatologic Practice,

Hamburg, Germany; ³Klinik für Dermatologie, Buxtehude, Germany;

⁴Medizinische Hochschule Hannover, Hannover, Germany

Background: Nail psoriasis is an extreme diagnostic and therapeutic challenge and represents an enormous physical and psychological burden for affected patients. 50% of patients with psoriasis vulgaris develop nail involvement (NailPso) during the course of their disease. NailPso is the strongest predictor of psoriatic arthritis (PsA). Through the synovio-enthesis concept we have learned that there is an anatomical-pathophysiological relationship between DIP joint, extensor tendon and nail matrix. We have observed in daily practice that hypervascularization (HV) in ultrasound Power Doppler (US-PD) the nail matrix may be a pathognomonic element in its own right. There are no data on this in the literature.

Objectives: Is there a difference in the ultrasound PD examination of the DIP joint and nail area and in the capillary microscopy of the corresponding nail fold in patients with psoriasis vulgaris and nail psoriasis versus patients with psoriasis vulgaris without nail psoriasis.

Methods: Monocentric prospective study of all consecutive patients with psoriasis vulgaris who have come to a rheumatic practice to clarify a PsA. In addition to demographic data, assessments (PASI, DLQI, CASPAR, GEPARD, DAS28, SJ, TJ, FFBH), clinical examination, a standardized ultrasound PD examination and capillary microscopy of the affected fingertips in PsO patients suffering from nail psoriasis was performed as well as corresponding examinations of the 2nd and 3rd finger right in PsO patients without nail involvement.

Results: 79 patients could be included during the study period. Thereof 25 PsO patients without nail involvement and 44 PsO patients with nail involvement. Since the patients were examined consecutively, the difference results. There was no difference in age, BMI and sex in both groups (PsO and NailPso). The Caspar criteria as classification criteria for a PsA were positive in 65% of the NailPso patients and positive in 50% of all PsO patients without nail involvement. Hypervascularization in the US-PD examination in the area of the nail matrix could be seen significantly more frequently in NailPso compared to non-NailPso patients. Such a difference did not exist in the HV of the extensor tendons. Capillary microscopy showed a significant difference in the number of torsions/twist capillaries in NailPso compared to PsO patients without NailPso. Hypervascularization of the nail matrix is seen significantly more frequently in patients with psoriasis of the nail than in patients without psoriasis of the nail. Such a difference does not exist in DIP joint -extensor tendon- enthesitis. At the same time, torsions are significantly more frequently seen in capillary microscopy in NailPso than in patients without NailPso.

Conclusion: The US-PD examination is a simple and non-invasive procedure which can be performed routinely in daily practice. The hypervascularization of the nail matrix should also make one think of nail psoriasis in the early stage of PsO, in order to be able to start early an appropriate therapy for this very stigmatizing and therapeutically extremely difficult manifestation of PsO. It seems to occur independently of extensor tendon synovitis as an independent manifestation phenomenon.

The occurrence of torsions in capillary microscopy >50 % also seems to be groundbreaking for a NailPso, whereby capillary microscopy is a temporal challenge in daily routine.

References: § The present study (7734-BO-S2018 Ethics Commission of the MHH, Medical School Hannover, Germany) contains parts of the PhD thesis of M. Töllner

Disclosure of Interests: Becker-Capeller Detlef Grant/research support from: Novartis, Speakers bureau: Pfizer, Soham El-Nawab-Becker: None declared, Malo Toellner: None declared, Andreas Kleinheinz: None declared, Torsten Witte: None declared

DOI: 10.1136/annrheumdis-2020-eular.186

AB1089

EVALUATION OF JOINT RHEUMATOLOGY/ RADIOLOGY MDT OUTCOMES & THEIR IMPACT ON RHEUMATOLOGY SERVICE

A. Ediriweera¹, W. P. Lee¹, M. Steward¹, O. Savanovic-Abel¹. ¹University Hospital Plymouth NHS Trust, Plymouth, United Kingdom

Background: Multidisciplinary team (MDT) discussion between rheumatology and radiology is vital in diagnostic and prognostic management of patients' outcome. Nevertheless, discrepancies of the radiology report and clinical history cause unnecessary confusion and distresses to clinicians and patients. This could potentially affect subsequent clinical management.

Objectives: This survey was aimed to evaluate outcomes of rheumatology / radiology MDT discussion and to identify any discrepancies between original reports of the radiology images and amended reports following MDT. We also looked for potential reasons for the discrepancies and their impact on patient and health care resources due to erroneous original reporting.

Methods: We looked at all types of images which were discussed in rheumatology/ radiology MDT of University Hospital Plymouth from October 2016 to