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**Background:** The term long-covid encompasses a heterogeneous spectrum of chronic symptoms following infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) [1].

**Objectives:** We report the features of chronic chilblain-like digital lesions newly presenting since the start of the covid-19 pandemic. Comparison with primary perniosis and acrocyanosis, reveals a unique phenotype which appears to be a long-covid phenomenon.

**Methods:** The case records of 26 patients with new onset persistent chilblain-like lesions presenting to the Rheumatology service of St George's University Hospital, London between Autumn 2020 and Spring 2022 were reviewed. Demographic and clinical features, serology, imaging, treatment response and outcome up to Summer 2022 were collated retrospectively.

**Results:** Chilblain-like lesions first occurred between September and March; 2019/2020 6 cases, 2020/2021 18 cases and 2021/2022 2 cases. Mean age 35.4 (17-60) years, female 88%, white 85%, all non-smokers. Median body mass index (BMI) 20.2, range 17.0 – 33.2. BMI underweight (<18.5) in 27%. All cases reported new red-purple-blue colour changes of the fingers, some with pain, swelling and pruritis, affecting both hands in 12, one hand in 6, and both hands and feet in 8 cases. There was a past history of cold sensitivity or primary Raynaud's in 54%. Covid was confirmed in 3 cases, 2 – 8 months prior to onset of chilblain-like symptoms. Possible covid, unconfirmed, was suspected in 5 cases, 1 – 11 months earlier. Affected digits appeared diffusely erythro-cyanotic in 81%, with blotchy discrete maculo-papular erythematous lesions in 42%, some with both features. Involvement was asymmetric in 54%, thumbs spared in 69%. Complement was low in 50% (8/16), ANA positive in 26% (6/23). MRI of hands showed phalangeal bone marrow oedema in keeping with osteitis in 4/7 cases, and no synovial hypertrophy or enthesal abnormalities. More severe signs and symptoms were associated with low BMI, low C3/4 and a past history of cold sensitivity or Raynauds. Cold avoidance strategies were sufficient for 58%. Pain prompted a trial of NSAIDs, aspirin, nitrates, calcium channel blockers, hydroxychloroquine, oral or topical corticosteroid or topical tacrolimus in 42%. In general, these were at best minimally effective or not tolerated. Four severe cases received sildenafil or tadalafil, effective in 2 cases. In 27% complete remission occurred during the first summer season after symptoms commenced, median duration 6 (range 2 – 10) months. In the remaining 19 cases, chilblain-like symptoms returned or worsened in the subsequent second winter period, with 6/19 entering remission the following summer. For the remaining 13 persistent cases the total duration of symptoms spans more than a year, and in four cases more than 2 years.

**Conclusion:** This series illustrates a distinct chronic chilblain-like condition. Features similar to primary perniosis include female predominance, middle age, pruritic painful blotchy lesions, asymmetry and low BMI. Features in keeping with acrocyanosis include chronicity, extensive diffuse erythro-cyanotic discoloration, relative improvement in warm weather and lack of association with smoking.

#### REFERENCE:

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#### AB1305 RHEUMATOID ARTHRITIS FLARE FOLLOWING COVID-19 VACCINATION IN MALAYSIAN POPULATION AND ITS ASSOCIATED RISK FACTORS

**Keywords:** Vaccination/immunization, Rheumatoid arthritis, COVID

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**Background:** Flare of Rheumatoid Arthritis (RA) following COVID-19 vaccination has been reported with a low occurrence observed in those patients with disease remission. However, no local data is available in our multi-ethnic Malaysian population.

**Objectives:** To evaluate the prevalence of RA flare in Malaysian patients following COVID-19 vaccination and its associated risk factors.

**Methods:** This was a cross-sectional study assessing RA flare based on patient-reported disease flare through self-administered questionnaires and physician-reported flare. Patient self-reported disease flare was defined as 'a sudden worsening of rheumatology condition or arthritis within 1 month post-vaccination' while physician-reported flare was defined as 'an increment of disease activity score 28-joint documented within 3 months post-vaccination' from either a scheduled or unscheduled clinic visit. A total of 186 RA patients attended the

rheumatology clinic in Hospital Putrajaya from May to July 2022 who completed the primary COVID-19 vaccination under the Malaysian National Vaccination Programme were recruited. Demographic data, disease parameters including serology for rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA), cessation of disease modifying anti-rheumatic drugs (DMARDs) around vaccination, type of vaccines and adverse events were examined using descriptive and univariate analyses.

**Results:** Majority (93%) of RA patients enrolled were female with a mean age of 58 years old (standard deviation, SD 12.2) and mean disease duration was 12 years (SD 7.7). More than half were seropositive (66% RF, 63% ACPA) with 47.4% had double seropositivity (RF and ACPA positive). All patients received DMARDs with the majority (71%) were on methotrexate (MTX), 21.5% were on leflunomide, 17.7% on other DMARDs, with a small proportion (14%) of patients were receiving prednisolone. Only 4.8% of patients were on biologics or targeted synthetic disease modifying anti-rheumatic drugs. Half of the patients were in remission prior to vaccination. 62% of patients received Pfizer-BioNTech vaccine as the primary vaccine, followed by Sinovac-CoronaVac (24.6%) and Oxford-AstraZeneca (13.4%) vaccines. A booster dose had been administered to 80% of patients, of which 88.7% was Pfizer-BioNTech vaccine. MTX therapy were discontinued in 39.4% of patients (n=52) post-vaccination for a week duration. The prevalence of RA flare was only 12.9% (n=24) in which 14 were self-reported and 10 were physician-reported flares (4 severe flare, 6 mild-moderate flare). Flare rates were higher during the first and second dose of vaccination with 29.2% respectively, and only 12.5% were reported after booster vaccination. Common vaccine adverse effects were fever (16.8%), myalgia (8.6%) and arthralgia (6.4%). There were no significant differences in the occurrence of flare post-vaccination between age, gender, disease activity prior to vaccination, types of vaccine, usage of MTX and prednisolone, and discontinuation of MTX post-vaccination. Although seropositivity did not exhibit statistically significant flare rate post vaccination, sub-analysis revealed four times higher rate of flare in those who has double positivity compared to seronegative RA patients (12% vs 4%).

**Conclusion:** Prevalence of RA flare post-COVID-19 vaccination in Malaysian RA population is low. No significant associated risk factors were identified although double seropositivity appeared to have higher number of flares.

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#### AB1306 HOW DOES COVID-19 VACCINATION AFFECT DISEASE ACTIVITY AND SAFETY IN SECUKINUMAB TREATED PATIENTS WITH AXIAL SPONDYLOARTHRITIS? REAL WORLD DATA FROM THE GERMAN AQUILA STUDY

**Keywords:** Spondyloarthritis, Vaccination/immunization, COVID

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**Background:** Patients (pts) suffering from a chronic rheumatic condition, such as axial spondyloarthritis (axSpA), and receiving immunosuppressive treatment during the COVID-19 pandemic have been shown to be at higher risk of severe disease outcomes. The German non-interventional study AQUILA provides real-world data in pts with axSpA under secukinumab (SEC) treatment and the influence of COVID-19 vaccination on disease activity (DA) and safety [1].

**Objectives:** The aim of this interim analysis was to describe selected baseline (BL) characteristics and the effect of vaccination on DA and safety in axSpA pts.

**Methods:** AQUILA is an ongoing, multi-center study including up to 3000 pts with axSpA or psoriatic arthritis. This analysis focuses on axSpA pts included from May 2019 to Oct 2022 and their vaccination status (no vs ≥1 vaccination) for study time points from BL up to week (w) 52 according to clinical routine. DA was assessed by validated Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) questionnaire and safety by documented number of (serious) adverse events (SAEs). Only pts with available BL BASDAI were considered and characterized by selected BL parameters, such as demographics and global functioning