

**P167 COVID-19 PERNIOSIS, A DIFFERENTIAL DIAGNOSIS TO CONSIDER IN ADOLESCENT PATIENTS PRESENTING WITH CHILBLAIN-LIKE LESIONS**

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**Background/Aims**

Chilblain-like lesions (perniosis) have been reported frequently during COVID-19 pandemic in children and adolescents with no history of exposure to cold temperatures or underlying autoimmune conditions. Patients with these skin changes reported mild COVID-19 symptoms or previous contact with confirmed COVID-19 cases before they became symptomatic. In the majority of cases, a causal relationship between SARS-CoV-2 infection and chilblain-like lesion has not been proven.

**Methods**

Retrospective review of patients with chilblain-like lesions, possibly secondary to SARS-CoV-2 infection, presenting to a tertiary Adolescent Rheumatology service between January and August 2021.

**Results**

We identified five, male, adolescent patients (mean age, 16 years old) who presented with new onset of chilblain-like lesions affecting fingers, toes and heels in December 2020, which coincided with the peak of second wave of COVID-19 infection. One month prior to skin changes occurrence, 3 out of 5 patients experienced mild respiratory COVID-19-like symptoms and the rest of the patients were asymptomatic but were in contact with COVID-19 positive cases following outbreaks in schools. 1 of 3 symptomatic patients had a positive COVID-19 PCR test prior to skin manifestations. 2 out of 4 patients with heel lesions had deep, full thickness skin loss heel ulcers and 2 of 5 patients had superficially ulcerated lesions on a finger and toes, respectively, resulting in inability to attend school. None of the patients had any other symptoms or signs to suggest an underlying autoimmune connective tissue disorder. Demographics, clinical features and serological data are summarised in Table 1. One patient underwent a biopsy of heel ulcer which was histologically consistent with perniosis. In two patients (40%) chilblain like lesions resolved spontaneously within 2 months. Three patients (60%), with progressive ulcerated lesions, required various combinations of treatments with aspirin, calcium channel blockers (nifedipine), topical or oral steroids and hydroxychloroquine with complete resolution of symptoms within 6 months.

**Conclusion**

Chilblain-like lesions, including heel involvement associated with mildly symptomatic COVID-19 infection, have been reported before. Our mini-case series raises awareness of ulcerating chilblain like lesions possibly secondary to COVID-19 in adolescent patients, which require early recognition and instigation of treatment leading to better patient's outcomes.

**Disclosure**

**N. Gak:** None. **V. Choida:** None. **M. Leandro:** None. **D. Sen:** None. **C. Ciurtin:** None. **C. Fisher:** None.

P167 TABLE 1 Demographics, clinical, laboratory findings of patients

Case	Age	Lesion location	COVID-19 symptoms	SARS-CoV-2 PCR / SARS-CoV-2 Ab	Autoimmune profile/ complement levels	Treatment/ skin symptoms resolution (months)
1	16	Fingers, toes, heels	No	NA/ Negative	ANA positive (1:80) ENA negative anti-dsDNA normal, C3, C4 normal	Aspirin, prednisolone, nifedipine, hydroxychloroquine /6
2	16	fingers heels, toes	No	NA/ Negative	ANA negative	Prednisolone, nifedipine/6
3	18	Toes, heels	respiratory	Positive/NA	ANA negative	Nil/1
4	16	Fingers, toes	respiratory	Negative/ Negative	ANA positive (1:320) ENA negative anti- dsDNA normal C3, C4 normal	Nil/2
5	16	Fingers, toes, heels	respiratory	NA/ Negative	ANA negative	nifedipine/6

NA: not available, PCR: polymerase chain reaction, SARS-CoV-2: severe acute respiratory syndrome coronavirus 2