

Papular Purpuric Gloves and Socks Syndrome in the setting of orchitis

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Background

Papular Purpuric Gloves and Socks Syndrome (PPGSS) is a rare acral dermatosis characterized by erythema and swelling of hands and feet following a viral infection, most commonly Parvovirus B19. We present a case of PPGSS in a patient with orchitis possibly due to *Paramyxoviridae* virus.



Figure 1. Clinical Manifestations. Non-blanching violaceous macules and thin papules on bilateral soles and palms



Figure 2. Clinical Manifestations. Non-blanching violaceous macules and thin papules on face with crust on the nasal radix

Case

A 28-year-old gentleman presented with one-week history of worsening scrotal pain and erythema, cough, rhinorrhea, and papular eruption involving his bilateral palms, soles, face, and distal forearms (**Figure 1, 2**). Physical exam showed erythematous scrotum with excruciating tenderness and no urethral discharge. Cutaneous findings demonstrated non-blanching violaceous macules and thin papules concentrated on the palms and soles, extending to the proximal extremities and trunk.

Laboratory findings showed WBC of $22 \times 10^9/L$ with neutrophilia (ANC $17.3 \times 10^9/L$) and lymphopenia (ALC $1.4 \times 10^9/L$) and elevated ESR of 105 mm/h. The patient was found to have numerous positive infectious studies, including: Monospot, EBV-VCA IgG, Epstein-Barr Nuclear Antigen IgG, SARS-CoV-2 PCR, *Paramyxoviridae* virus IgM (Mumps), and *Mycoplasma* IgG antibody.

Biopsy showed prominent papillary edema, perivascular lymphocytes with histiocytes, and extravasated red cells (**FIGURE 3, 4**). The constellation of cutaneous exam, orchitis, numerous positive viral culprits, and histology were suggestive of PPGSS.

The patient was treated with broad-spectrum antibiotics for orchitis and triamcinolone 0.1% ointment BID for cutaneous findings.

Conclusions

Up to now, one adult case of PPGSS associated with SARS-CoV-2 has been reported and none associated with *Paramyxoviridae*. This case highlights the importance of considering numerous potential viral pathogens as causes of atypical presentations of PPGSS in adult patients.

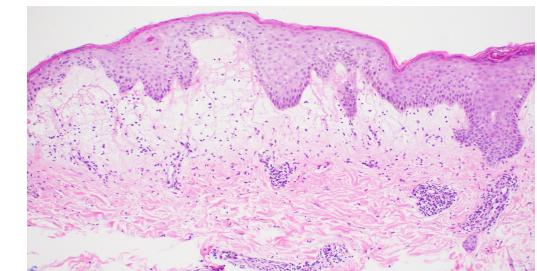


Figure 3. Histological Findings. 100X power photo showing superficial dermis with prominent papillary dermal edema and mild inflammatory infiltrate

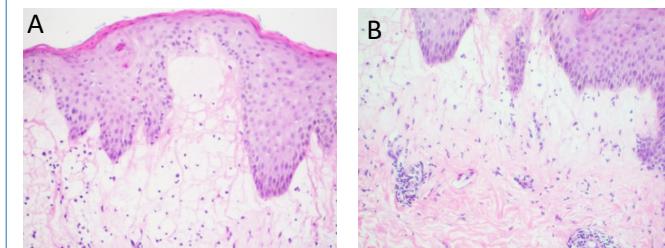


Figure 4. Histological Findings. 200X power photos showing (A) lymphocytes and histiocytes and (B) scattered erythrocytes