



AUTOIMMUNE CONNECTIVE TISSUE DISEASES

SYSTEMIC LUPUS ERYTHEMATOSUS & PARVOVIRUS B19 INFECTION – JUST A COINCIDENCE??

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease of multifactorial origin involving intrinsic mechanisms (genetic predisposition) and extrinsic (role of viruses). Several studies sought a possible correlation between the pathogenesis of SLE and infection with Parvovirus B19, which may play a role in inducing, triggering or mimicking SLE.

Observation: 36 Year old female, diagnosed case of SLE on steroids and hydroxychloroquine since 3 months, presented with complaints of red blisters followed by ulcers over the legs since two weeks. O/E- small erythematous ulcers were present over lower 1/3rd of legs. Few targetoid lesions and vesicles were also present. The differential diagnosis were 1) Erythema Multiforme as Rowell's disease 2) Small vessel vasculitis.

ANA was positive with a speckled pattern (1+). dsDNA levels at the time of diagnosis of SLE (3 months back) were 146.98 IU/ml and 184.5 IU/ml, in an interval of 10 days. Anticardiolipin antibodies were positive.

Skin biopsy showed features of an intra-epidermal bullous lesion showing viral cytopathic effects with mild leucocytoclastic vasculitis. Immunofluorescence with IgG, IgM, IgA and C3 was negative.

Parvo virus IgG and IgM antibody was positive.

The skin lesions were managed conservatively with topical antibiotics and after resolution of lesions a repeat dsDNA levels showed a decrease (12 IU/ml).

Key message: Parvovirus B19 infection has been associated with a variety of rheumatic manifestations/diseases, mainly rheumatoid arthritis, Behcet's disease and SLE. The presenting features of this patient, viral cytopathic features on skin biopsy and the decreasing dsDNA titres, raise the question of whether parvovirus infection was an inducer, a trigger or just a mimicker of SLE. The exact relationship between Parvovirus B19 and SLE requires large sample studies as they have comparable clinical symptoms and laboratory parameters and this observational report is to rekindle research into this curious association.

