



PHOTOBIOLOGY AND PHOTOPROTECTION

PELLAGRA IN A PATIENT WITH EHLERS-DANLOS SYNDROME AND PHOTOSENSITIVITY

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Background: Pellagra is a systemic disease due to severe vitamin B3 (Niacin) deficiency commonly seen during chronic food shortage in Victorian times, in people with mainly maize diet. The characteristics of Pellagra include diarrhoea, dermatitis, dementia and death.

Observation: We report a 49-year-old lady, of Cypriot origin, referred to Photobiology unit with a 3-year-history of a photosensitivity rash, associated with dry skin and brittle nails, which developed shortly after she had a naso-jejunal feeding tube inserted. She experienced erythema and papules after 10-20 minutes of sun exposure. The rash settled down after three weeks with peeling of skin.

She has a complex history of Ehlers-Danlos syndrome characterised by gastroparesis and autonomic dysfunction.

Her monochromator testing showed normal erythema thresholds. Provocation testing with broadband UVA and solar simulator both provoked definite erythema. Connective tissue screen, patch and photo-patch testing to a range of sunscreen ingredients were all negative. The cause is not clear with these results. It is highly possible due to severe malnutrition.

She has ongoing issues with tolerating enteral feeding. She only managed to tolerate a maximum of 390-455kcal and 20.1g-23g of protein intake daily. Her BMI is 19.5kg/m². We carried out a range of blood tests assessing her nutrition levels and confirmed that she has vitamin B3 and zinc deficiencies. Her vitamin B3 level was low at 38.

She was treated with oral Niacin 150mg daily.

Key message: In conclusion we presented a rare case of pellagra which developed following a low caloric intake from enteral feeding. This case highlights the importance of taking a thorough dietary history. Assessing the niacin level involves a simple blood test which established the diagnosis for this case. Although pellagra is not a common condition in the UK, we should always consider niacin deficiency as a potential cause of a photosensitive rash.

