11. A COMPARATIVE STUDY OF THE CLINICAL FEATURES OF DERMATOMYOSITIS IN CHILD AND IN ADULT PATIENTS WHERE THE ANTI-MI-2 ANTIBODY IS PRESENT

S Rasul1 and H Chinoy2
1Centre for Musculoskeletal Research, Division of Musculoskeletal & Dermatological Sciences, School of Biological Sciences, 2.810 Stopford, The University of Manchester, Oxford Road, Manchester, M13 9PT, UK

Background: Idiopathic inflammatory myopathies (IIM) are recognised to be a rare disease group, governed partly by genetics and partly by the environment. Studies have considered the disease characteristics of IIM, in particular dermatomyositis, finding that features such as rash and patterns of muscle weakness are connected with the presence of specific antibodies (1,2). They generally have not, however, considered the impact of age on clinical features within groups of dermatomyositis patients with the same antibody.

Aims: The aim of this study was to compare clinical features of dermatomyositis (DM) in adult and paediatric patients where the anti-Mi-2 antibody is present. Existence of other antibodies was not noted, as the presence of more than one myositis specific antibody in one patient is rare.

Methods: Data was obtained from the Juvenile Dermatomyositis Research Group (JDRG), dataset for juvenile data, and the UKMyonet dataset, for adult data. Further, data on human leukocyte antigen (HLA) types (international dataset) was obtained for adult patients, juvenile patients and controls from a separate UKMyonet dataset. Comparisons were made in the clinical features of rash, calcinosis, Gottron’s papules, arthritis and Raynaud’s disease using data from the JDRG dataset (14 patients) and UKMyonet patient clinical feature dataset (66 patients). The HLA data was analysed separately from the JDRG and adult clinical feature data, and was used to compare the HLA associations between adult DM (n = 879) and juvenile dermatomyositis (JDM, n = 481) and controls (4,332).

Results: The results showed a significantly higher frequency of Gottron’s papules and rash in the adult cohort (OR 7.41 (95% CI 1.47 – 37.28) and 3.85 (95% CI 0.86 – 17.18) respectively). It was also noted that a high number of juvenile patients did not have calcinosis. A strong association between both DM and JDM and HLA-DRB1+16 (OR 4.38 and 1.4 respectively, p value = 0.001 and 0.2 respectively) was found, on analysis of the HLA data.

Conclusions: Overall clinical features for DM patients were more frequent in the older population. In particular the data suggests that being an adult influences the presence of Gottron’s papules and rash in patients where anti-Mi-2 antibodies are present. The comparisons made in this study make it unique and lays the foundation for further examination of the data such as looking at disease out comes and in adult patients as compared with juvenile patients in whom the anti-Mi-2 antibody is present.

References