Correlation between cbPWV/crPWV and Capillary count

Conclusions: Our findings demonstrate that arterial stiffness of the forearm has a relationship with nailfold capillary count and tends to be associated with the extent of disease in patients with SSc. These preliminary data may suggest that vascular damage may concomitantly occur in both capillaries as well as larger arteries of the forearm, which may potentially serve as a novel tool for assessing of early vascular involvement in SSc.

Disclosure of Interest: None declared

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FRI0455

INCREASING INCIDENCE OF ADULT IDIOPATHIC INFLAMMATORY MYOPATHIES: A TEN-YEAR UK EPIDEMIOLOGICAL STUDY

M.J.S. Parker^{1,2}, A. Oldroyd³, M.E. Roberts⁴, R.G. Cooper⁵, H. Chinoy³, on behalf of UKMYONET. ¹Rheumatology Department, Royal Prince Alfred Hospital, Sydney, Australia; ²Rheumatology Department, Salford Royal NHS Foundation Trust, Salford; ³Centre for Musculoskeletal Research, University of Manchester, Manchester; ⁴Greater Manchester Neurosciences Centre, Salford Royal NHS Foundation Trust, Salford; ⁵MRC-ARUK Centre for Integrated Research into Musculoskeletal Ageing, University of Liverpool, Liverpool, UK

Background: Studying the epidemiology of rare conditions such as the idiopathic inflammatory myopathies (IIM) can assist in the identification of risk factors, disease associations and temporal trends. Interrogation of differing geographically and genetically diverse populations can help to construct a more complete picture of underlying disease patterns. A number of UK centres have contributed to national and international IIM research collaborations, but to date there has been no published report detailing the incidence or prevalence of adult IIM in the UK, or to establish the relative proportion of the varying clinical subtypes. Moreover, previous international studies have focussed on specific IIM subtypes, such as inclusion body myositis (IBM) or immune-mediated necrotising myopathy (IMNM), are historic, were undertaken before recent developments in our understanding of the range of IIM subtypes, and utilised widely varying methodologies and case acquisition strategies.

The recently published combined European League Against Rheumatism and American College of Rheumatology (EULAR/ACR) classification criteria for adult and juvenile IIM represent potential progress in identifying IIM, as well as various disease subtypes¹. We present here the first epidemiological study to utilise these new criteria as part of disease verification.

Objectives: Identify and characterise all incident adult cases of IIM between Jan 1 st 2007 and Dec 31 st 2016 in the City of Salford, UK.

Methods: Adults first diagnosed with IIM within the study period were identified by: i) a Salford Royal NHS Foundation Trust (SRFT) inpatient episode IIM-specific ICD-10 coding search; ii) all new patient appointments to SRFT neuromuscular outpatient clinics; iii) all Salford residents enrolled within the UKMYONET study. All patients with 'definite' IIM by the 2017 EULAR/ACR classification criteria were included, as were 'probable' cases if expert opinion agreed. Cases were excluded if <18 years at disease onset, if they did not meet 'probable' criteria, or when 'probable' but expert opinion concluded a non-IIM diagnosis.

Results: The case ascertainment procedures identified 1156 cases which, after review and application of exclusion criteria, resulted in 32 incident cases during

the study period. 23/32 were female with a mean age of 58.1 years. The mean incidence of adult IIM was 17.6/1,000,000 person years (py), higher for females than for males (25.2 versus 10.0/1,000,000py respectively). A significant incidence increase over time was apparent (13.6 versus 21.4/1,000,000py; $p=0.032$). Using EULAR/ACR classification criteria, the largest IIM subtype (21/32) was polymyositis, followed by dermatomyositis (8/32), inclusion body myositis (2/32) and amyopathic dermatomyositis (1/32). Expert opinion subtype differed from EULAR/ACR Classification criteria in 19/32 cases.

Conclusions: The incidence of adult IIM in Salford is 17.6/1,000,000py, higher in females and is increasing over time. Disagreement exists between EULAR/ACR-derived and expert opinion-derived IIM subtype assignments.

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FRI0456

PREDICTORS FOR DISEASE WORSENING DEFINED BY ORGAN FAILURE IN DIFFUSE SYSTEMIC SCLEROSIS: A EUROPEAN SCLERODERMA TRIALS AND RESEARCH (EUSTAR) ANALYSIS

M.O. Becker¹, N. Graf², R. Sauter³, Y. Allanore⁴, J. Curram⁵, C. Denton⁶, D. Khanna⁷, M. Matucci-Cerinic⁸, J. Pena⁹, J.E. Pope¹⁰, O. Distler¹. ¹Department of Rheumatology and the Centre of Experimental Rheumatology, University Hospital Zurich, Zurich, Switzerland; ²Graf Biostatistics, Winterthur, Switzerland; ³Big Data Institute, Li Ka Shing Centre for Health Information and Discovery, Nuffield Department of Medicine, University of Oxford, Oxford, UK; ⁴Paris Descartes University, Sorbonne Paris Cité, Rheumatology A Department, Cochin Hospital, Paris, France; ⁵Bayer Plc, Reading, UK; ⁶UCL Division of Medicine, Royal Free Campus, London, UK; ⁷Division of Rheumatology, Department of Internal Medicine, University of Michigan Scleroderma Program, University of Michigan, Ann Arbor, MI, USA; ⁸Department of Experimental and Clinical Medicine, University of Florence, Florence, Italy; ⁹Bayer US LLC, Whippany, NJ, USA; ¹⁰Department of Medicine, Division of Rheumatology, University of Western Ontario, St. Joseph's Health Care, London, ON, Canada

Background: Mortality and worsening of organ function are desirable endpoints for clinical trials in systemic sclerosis (SSc). However, these events are relatively rare, making clinical trial design challenging.

Objectives: To identify factors in a population of patients with diffuse SSc from the European Scleroderma Trials and Research (EUSTAR) group database that predict these endpoints and hence allow enrichment of those patients.

Methods: Inclusion criteria were a diagnosis of diffuse SSc and follow-up after 9–15 (12±3) months. This timeframe was chosen to reflect typical clinical trial design. Disease worsening/organ progression was fulfilled if any of the following events occurred: new renal crisis, decrease in forced vital capacity (FVC) ≥10%, new left ventricular ejection fraction (LVEF) <45% or decrease in LVEF by >10% for patients with baseline LVEF <45%, new pulmonary (arterial) hypertension, or