inflammatory infiltrate rich in T cells. It is not known whether recruited T cells induce fibrosis or react to developing fibrosis.

Objectives Chemokines (CC) are involved in cell recruitment into inflammatory sites. Our aim was to characterise the CC receptor (R) usage as well as the effector function of T cells infiltrating a developing fibrotic skin lesion in a SLE patient.

Methods T cells from a lesional skin biopsy were grown *in vitro* in the presence of IL-2. TcR, accessory molecules, and CCR expression were analysed by flow cytometry and RNase protection assay. The capacity to release interferon- γ (IFN- γ) and IL-4 was assessed upon CD3-crosslinking in phenotypically homogeneous T cell lines or clones. The chemotactic responses to synthetic CC was assessed. Immunohistochemistry was performed on the same tissue.

Results T cells infiltrating the affected skin were heterogeneous in terms of accessory molecules (CD4⁺, CD8⁺, and CD4CD8 double negative) as well as of TcR (a/b and g/d) expression. The majority preferentially produced IFN- γ , while a minority produced both IFN- γ and IL-4. Preferential expression of type-1-related CXCR3 (and response to relevant CC) was observed and confirmed by tissue immunohistochemistry. Interestingly, several T cells coexpressed type 1 and type 2-related CCR and migrated to an equivalent extent in response to specific ligands.

Conclusion The analysis performed on T cells infiltrating a novel fibrotic skin lesion from a SLE patient has revealed heterogeneous expression of CC receptors by T cells preferentially producing IFN- γ . Since IFN- γ exerts a potent inhibitory activity on ECM deposition by fibroblasts, these results hint to a reactive mechanisms aimed to control the extent of fibrosis.

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FRI0209 RATE OF CEREBRAL MICROEMBOLI IN APS CAN BE INFLUENCED VIA BLOCKADE OF GPIIb/IIIa PLATELET RECEPTOR WITH TIROFIBAN

¹C Specker, ¹A Perniok, ²T Menge, ²M Siebler, ¹M Schneider. ¹Department of Rheumatology; ²Department of Neurology, Heinrich-Heine-University, Düsseldorf, Germany

10.1136/annrheumdis-2001.290

Background Patients with antiphospholipid syndrome (APS) are prone to thromboembolism. So far, the only predictive parameters for further complications are their number in patient's history and perhaps the titre of aPL. Derived from clinical investigation of stroke and obvious analogies between cerebrovascular ischemia (CVI) in patients with carotid artery disease (CAD) and patients with APS, a novel non-invasive method using transcranial Doppler (TCD) is used for detection of so called 'microembolic signals' (MES) in the cerebral vasculature. In patients with CAD, these 'microemboli' proved to correlate with past and impending symptoms of CVI allowing for therapeutic stratification by their detectability. We found very similar signals in the cerebral bloodstream of APS patients with a history of CVI.

Detectability of MES in APS implies occlusive thromboembolism and not vasculitis as the underlying mechanism at least in arterial cerebrovascular manifestations of this state. However, Doppler signal properties (i.e. the reflected energy) do not allow

for direct estimation of the signal's substrate size or composition.

Objectives To further elucidate the pathophysiological substrate of MES in APS.

Methods Repeated TCD monitoring in a 38 year old female APS patient with ongoing transitory ischaemic attacks and high rate of MES before and after intravenous administration of Tirofiban, a potent, synthetic, highly selective and reversible inhibitor of platelet gpIIb/IIIa receptor which binds fibrinogen on the platelet's surface.

Results Within one hour the rate of MES decreased from ~50/hr to <5/hr on three successive occasions accompanied by cessation of clinical symptoms. Using flowcytometry, platelet-leucocyte aggregates found increased before administration of Tirofiban were also reduced considerably.

Conclusion The finding that MES are influenced by blockade of the platelet gpIIb/IIIa receptor and correlate with platelet-leucocyte aggregates argues for a central role of thrombocytes in APS with CVI. This might favour to look for thrombocyte targeted prophylactic therapy in APS. Whether detection of MES can also serve to monitor such therapies has still to be proved.

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FRI0210 CARDIAC INVOLVEMENT IN SYSTEMIC SCLEROSIS (SSC) – DOPPLER ECHOCARDIOGRAPHY STUDIES IN 100 SSC PATIENTS

AV Volkov, GP Kotelnikova, ES Match. Department of Microcirculation and Inflammation, Institute of Rheumatology of RAMS, Moscow, Russia

10.1136/annrheumdis-2001.291

Background Cardiac involvement is a relatively common occurrence in systemic sclerosis. When this complication is clinically recognisable, the prognosis is usually poor. However, heart abnormalities are frequently asymptomatic and they can only be diagnosed by Doppler- echocardiography.

Objectives The aim of this study is to find out the frequency of different variants of cardiac involvements in SSC pts and connexion with other SSC manifestation.

Methods 100 SSC pts (18 male and 82 women, mean age $\pm$ SD 51,8 $\pm$ 14,1 years, ranging from 15 to 83 years, mean duration of disease $\pm$ SD 10,11 $\pm$ 9,22 years). All of the pts were clinically studied with Doppler Echocardiography.

Results According to the Doppler Echocardiography studies cardiac involvement was found in 82% occurrences, and was the most frequent symptoms of internal organ damage. Pericard, myocard and endocard were involved. Pericarditis was found in 30% pts, higher frequency (25%) in limited cutaneous SSC, and correlated with disease duration. Pericarditis pts have more frequently interstitial lung disease, pulmonary hypertension. The microcirculation changes such as tendency to decreasing of basal digital blood flow and the reduction of capillar loops density were noted in the pericarditis patients. The changes in the size of left ventricular were more frequent in pts with diffuse cutaneous SSC, shorter duration of the disease and arterial hypertension, the latter does not exclude the influence of age factors in evolution of these changes. Diastolic disfunction was found in 25%