confirmed increased carotid plaque formation, increased cIMT. Biologics may beneficially influence some parameters in the intracranial vessels.

Disclosure of interest None declared

PLASMA LEVELS OF HSP90 ARE INCREASED IN PATIENTS WITH SYSTEMIC SCLEROSIS WITH MORE SEVERE ORGAN INVOLVEMENT

Introduction Our previous study demonstrated that Hsp90 is overexpressed in the skin of patients with systemic sclerosis (SSc), in cultured SSc fibroblasts and preclinical models of SSc. We showed that Hsp90 is a regulator of TGF-β signalling and its inhibition prevents the stimulatory effects of TGF-β on collagen synthesis and dermal fibrosis in three preclinical models of SSc.

Objectives The aim of this study was to evaluate Hsp90 in the circulation of SSc patients and characterise its particular association with skin changes and SSc-related features.

Methods A total of 91 patients (78 females; mean age 52.7; disease duration 6.0 years; diffuse cutaneous (dc)SSc/limited cutaneous (lc)SSc=38/53) who met the ACR/EULAR 2013 criteria for SSc and 85 age-sex-match healthy controls (HC) were included. Plasma Hsp90 was measured by ELISA. Data are presented as median (IQR).

Results Plasma Hsp90 levels were increased in SSc patients compared to HC [12.5 (9.6–17.9) vs. 9.9 (7.9–12.6) ng/mL, p=0.001], but no difference between lcSSc and dcSSc were detected [13.1 (9.4–18.1) vs. 11.5 (9.5–17.5) ng/mL, p=0.316]. Hsp90 levels in all patients positively correlated with CRP (r=0.313, p=0.006). Furthermore, Hsp90 was increased in patients with interstitial lung disease (ILD) compared to those without ILD [12.8 (10.2–17.9) vs. 10.3 (8.6–16.6) ng/mL, p=0.045] and was negatively associated with skin changes and SSc-related features.

Conclusions We demonstrated higher plasma levels of Hsp90 in SSc patients compared to healthy controls. Concentrations of extracellular Hsp90 increase with higher inflammatory activity, with deteriorated lung functions in ILD and also with the extent and severity of the skin involvement in patients with diffuse cutaneous SSc. These data further highlight the role of Hsp90 as a significant regulator of fibroblast activation and tissue fibrosis in SSc.

ANTI-TNF TREATMENT IMPROVES VASCULAR FUNCTION VIA SUPPRESSION OF GALECTIN-3 EXPRESSION DURING INFLAMMATORY ARTHRITIS

Introduction The link between rheumatoid arthritis (RA) and cardiovascular disease (CVD) is well established but not yet fully understood. Anti-TNF treatment, e.g. with Enbrel, is one...