

psoriasis are being compared with findings in a matched control group. **Conclusion:** A subgroup of patients with severe psoriasis who also have carotid artery plaques are being assessed during an exacerbation of their psoriasis and the results compared with findings during a remission. These assessments will include platelet aggregation and blood viscosity, serum markers and mediators of plaque instability, carotid 3-Tesla MRI with dedicated carotid coils, and imaging of plaque metabolic activity using FDG-PET.

P21

Association Between Increased Carotid Intima-media Thickness and Cytomegalovirus Seropositivity in Stroke Patients

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Objective: Increased common carotid artery intima-media thickness is associated with an increased risk of stroke. A link between cytomegalovirus (CMV) infection and intima-media thickness has been suggested by experimental, clinical, and epidemiologic studies. We investigated the association between CMV antibody titers in a serum collected from stroke patients and intima-media thickness of common carotid artery. **Methods:** High-resolution B-mode ultrasonographic measurements of the common carotid artery intima-media thickness were performed in a consecutive series of 102 patients hospitalized with ischemic stroke. Verified stroke cases were compared with gender- and age-matched controls. (n=48) and divided into 3 groups according TOAST criteria: atherothrombotic (n=36), cardioembolic (n=47) and indeterminate etiology (n=19). All stroke risk factors were documented and comparative analysis was performed. Blood samples from each individual were tested for anti-CMV IgG antibodies using an enzyme-linked immunosorbent assay. **Results:** Anti CMV IgG was detected in 96 of 102 (94%) patients with stroke. Elevated CMV (IgG) titers were associated with increased common carotid artery intima-media thickness ($r=0,21$; $p=0,026$). There was not statistically proved relationship between elevated IgG titers and other stroke risk factors. **Conclusions :** Elevated anti CMV IgG titers are associated with increased common carotid artery intima-media thickness.

P22

Carotid Intima-media Thickness in Female Rheumatoid Arthritis Patients

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Objectives: Intima-media thickness (IMT) of the carotid arteries in patients with RA is potential maker of inflammation and subclinical atherosclerosis. **Methods:** IMT was measured ultrasonographically in 42 non-diabetic, normotensive, female RA patients and 32 matched healthy controls (age 45.3 ± 10.0 vs 45.2 ± 9.8 years) at common carotid arteries (CCAs), carotid bifurcation (BF) and internal carotid arteries (ICAs), bilaterally. Mean IMTs were calculated from three measurements at each site. Clinical work-up included laboratory analyses, determination of the disease activity and evaluation of treatment. **Results:** RA patients had increased IMT (mm) in comparison with controls: CCA: 0.671 ± 0.119 vs 0.621 ± 0.085 ; bifurcation: 0.889 ± 0.168 vs 0.804 ± 0.124 ; ICA: 0.577 ± 0.101 vs 0.535 ± 0.076 . Parameters associated with IMT in RA patients were: age, BMI, smoking, RF concentration, sedimentation rate. Duration of MTX + chloroquine therapy were in inverse correlation. Multivariate regression analysis revealed that RA is an independent risk factor for increased IMT. Factors correlating with IMT in the controls were: age, BMI, total cholesterol, low-density lipoprotein cholesterol, total/high-density lipoprotein cholesterol, triglycerides and glycaemia. **Conclusion:** Female RA patients had significantly enlarged carotid IMT than controls. RA itself was an independent risk factor for increased IMT. Impact of chronic inflammation on atherosclerosis was confirmed by negative correlation of IMT and duration of anti-inflammatory treatment.

P23

The DAY TIA Project: A Single Centre Pathways of TIA Management Based on Risk Levels and Guided by Neurosonological Evaluation

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Objectives: TIA is a main challenge for the neurovascular physician, because of the early risk of stroke recurrence and the possibility of an effective secondary prevention. Then several models of management of TIA patients have been proposed both in outpatients and inpatients. In our institution we proposed an integrated ED-Neurovascular Unit multidisciplinary pathway of emergency management of TIA patients based on recurrence risk categorization by ABCD2 score. Our purpose is to compare recurrences with expected rates by ABCD2 score. **Methods:** The score was complemented by vascular occlusive pattern diagno-

sis by neurosonological techniques and brain lesional pattern by DWI-MRI. Timing of diagnostic procedures was guided by risk level, but neurosonological evaluation was made in all patients within 7 days. **Results:** Between June 2008 and December 2009, 358 patients were evaluated in our department with a TIA diagnostic suspicion. 111 pts (31%) were shifted in the mimic TIA category, and the remaining 247 was diagnosed as ischemic vascular patients (27.93% ischemic stroke). 19 patients (7.69%) had a >70% extracranial ICA stenosis as a cause of cerebrovascular accident and 18 underwent CEA (12 within 24 hours). 31 patients (12.55%) had a symptomatic intracranial stenosis and 44 pts (12.68%) has a cardioembolic source identified (mainly atrial fibrillation). TIAs of undetermined origin were 16 (6.48%). Recurrences were 9 at three months follow-up. **Conclusions:** The management TIA pathway based on risk level with neurosonological assistance is feasible and effective in secondary prevention strategies.

P24

Ultrasound Evaluation of Carotid Atherosclerosis Progression

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Objective: Carotid atherosclerosis is a leading cause of ischemic stroke. While criteria for surgical treatment are clearly defined, no clear determinants are known to predict stenotic progression. To evaluate carotid atherosclerotic progression using ultrasound and correlate it with risk factors. **Methods:** Prospective study of 51 patients with stroke, followed from 2004/06 and 2005/07, in order to evaluate progression of stenosis during a two year period. Measurements were obtained according to NASCET criteria. Patients were categorized according to age, gender, presence of hypertension, diabetes, hypercholesterolemia and smoking habits. **Results:** From the 51 patients evaluated there were 33 men and 18 women with a mean age 70 years (45y-85y) progression was observed in 28 (55%). Fifty (98%) of the patients were hypertensive, which of them 28 (56%) progressed, from the hypercholesterolemic group 29 (57%), 19 (66%) increased their stenosis. Six (12%) were currently smokers and 14 were non-smokers for more than years and 31 (61%) had no history of smoking habits. In the current smokers group a progression was seen in 5 (83%), while in the non-smokers progression was seen in 8 (57%). Hypertension, current smoking habits and age (=65y) were major risk factors for the progression of the carotid atherosclerotic plaques. Males were more susceptible to the earlier and faster atherosclerotic carotid progression. When progression occurred there was an increased of 10% in the 2 years period. **Conclusion:** Those data will allow identifying the group of patients at higher risk of atherosclerotic progression and will need a closer ultrasound follow-up.

P25

Mobile Carotid Thrombus Identified by Ultrasound

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Objective: Mobile carotid thrombus in the extracranial segment is an uncommon finding and rarely identified by carotid ultrasound. Although its identification is important due to the risk of stroke. We present a case of mobile carotid thrombus found at left internal carotid artery and presented a stroke. **Method:** 62y old man, caucasian seen at the emergency room due to signs of acute left hemispheric signs. **Results:** CT showed a left frontoparietal hypodense image suggesting acute ischemic stroke in the territory of left middle cerebral artery. Carotid Color-Coded ultrasound examination showed a pulsatile moving hypodense image located at left carotid artery restricting arterial lumen in about 90%. Patients was then prompted to endarterectomy. **Conclusion:** Intra-arterial mobile thrombus in carotid arteries are threatening situations and need urgent surgical removal. Their identification by carotid ultrasound have been reported in just a small number of cases, being angiography the most used method. Nevertheless, ultrasound can non-invasively identify thrombus, its volume and dynamics in case of a floating thrombus. In the present case, mobile thrombus was successfully removed without any vascular event on follow-up.

P26

Characterization of Carotid Artery Plaques: Comparison Between High-resolution 3-Tesla MRI and Ultrasound

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Objective: To investigate the morphology of atheromatous carotid artery plaques as assessed by high-resolution 3-Tesla magnetic resonance imaging (hr-MRI) and ultrasound including 3D-compound B-mode and color-coded duplex ultrasound. **Methods:** We examined patients with different degrees of carotid artery stenosis using hr-MRI (Siemens Magnetom Trio using a standardized protocol including time of flight [TOF], T1-, PD- and T2-weighted with a phased-array carotid artery coil) and extracranial ultrasound (color-coded duplex ultrasound and 3D-compound B-mode imaging). Two observers independently categorized atheromatous plaques by the degree of stenosis, plaque morphology and surface characteristics according to the modified AHA classification and previously published ultrasound criteria based on the plaque echogenicity. **Results:** 11 consecutive patients (7 m., 4 w., mean age 73 y.) with a degree of stenosis ranging from 40% to 89% (<50%: n=2, 50–69%: n=7, 70–89%: