Conclusion Discussion: The case suggests that hypertension and renal failure should be recognised as a complication of APS, the aetiology being primary intrarenal vascular disease with nephroangiosclerosis. It illustrates also how primary APS presenting with renal manifestation can result in a fatal form of CAPS.

REFERENCES

- 1 Asherson RA. The catastrophic antiphospholipid syndrome 1998. A review of the clinical features, possible pathogenesis and treatment. *Lupus* 1998;7(Suppl 2): S55-62
- 2 Durand JM, Lefevre P, Kaplanski G, Casanova P, Soubeyrand J. Accelerated hypertension and nephroangiosclerosis associated with antiphospholipid syndrome. Report of two cases and review of the literature. *Clin Rheumatol*. 1994;13(4):635-40

FRI0175 CLINICAL MANIFESTATIONS OF ANTIPHOSPHOLIPID SYNDROME IN FEMALES WITH OBSTETRIC PATHOLOGY AND ANTIPHOSPHOLIPID ANTIBODIES

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Background

Objectives Antiphospholipid antibodies (APA) were studied in 94 women with a history of recurrent fetal loss and other obstetric complications associated with antiphospholipid syndrome (APS) such as fetal growth retardation, pre-eclampsia, intrauterine fetal death.

Methods

Results APA were found in 43,6% of them: lupus anticoagulant (LA) in 24,5%; anticardiolipin antibodies (aCL) ? in 10,6% and 8,5% had LA and aCL mixture. Only 4,5% of studied women had moderate or high levels of IgG aCL.

All women were examined in order to find extragenital manifestations of APS. Clinical features associated with APS including recurrent miscarriages were found in 81,6% women with APA circulation. Extragenital features of APS had 45,5% patients: recurrent arterial or venous thrombosis, thrombocytopenia in 20,4% cases. 25,1% women had possible APS features such as livedo reticularis, damage of cardiac valves, stroke, transient ischaemic attacks, migraine, leg ulcers, syndrome Reino. 29,5% APA-positive women had arterial hypertension. The most serious vascular complications took place in group with high and moderate levels of IgG aCL. One case of systemic lupus erythematosus was diagnosed (according to the American Rheumatism Association criteria).

Conclusion Women with APA circulation had not only obstetrical complications of APS. In 45,5% of them definite and possible features of this pathology were found.

FRI0176 ANTIBODIES TO CARDIOLIPIN AND B2GPI IN THE GROUP OF WOMEN'S POPULATION WITH THE HISTORY OF RECURRENT SPONTANEOUS ABORTIONS

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Background

Objectives To determine the significance of IgG anticardiolipin antibodies (aCL) and IgG antibodies to b2GPI (anti-b2GPI) in

the group of women's population with the history of recurrent spontaneous abortions.

Methods 58 women with one, two, three and more spontaneous abortions (mean age ? 29,9 ± 5,7 years) were examined. Three of them were observed out of pregnancy. In control groups 12 healthy female donors (mean age ? 29,7 ± 4,2 years) and 10 normal pregnant women (mean age? 23,2 ± 4,6 years) without history of any spontaneous abortions were included. IgG aCL and IgG anti-b2GPI were measured by ELISA.

Results The elevated levels of both autoantibodies were not noted in both control groups. In the main group in 17 (29,3%) of 58 patients (pts) IgG aCL or IgG anti-b2GPI were found. Elevated levels of IgG aCL only in 11 (64,7%) of 17 pts with antiphospholipid antibodies were noted respectively. Elevated level of IgG anti-b2GPI only wasn't noted in any pts. Elevated level of IgG anti-b2GPI and IgG aCL together had 6 (35,3%) pts.

In the group with IgG aCL without IgG anti-b2GPI (n = 11): 1) the history of one or two spont.ab. had 6 (54,5%) pts, three and more spont.ab.? 5 (45,5%) pts (mean number? 2,2 ± 1,8); 2) the clinical manifestations of the antiphospholipid syndrome (APS) were noted in 8 (72,7%), among them: 1(12,5%) pts had definite APS, 4 (50%) pts ?probable APS and 3 (37,5%) pts ? dubious APS; 3) the clinical manifestations of APS, such as deep venous thrombosis had 2 (18,2%) pts, migraine ? 7 (63,6%) pts, thrombocytopenia ? 1 (9,1%) pts. The evidences of stroke, livedo reticularis and ulcers of extremities had no one; 4) titers of antibodies were low in 3 (27,3%), medium ? in 7 (63,6%) and high ? in 1 (9,1%) pts.

In the group with IgG aCL and IgG anti-b2GPI (n = 6): 1) the history of one or two spont.ab. had 2 (33,4%) pts, three and more spont.ab.? 4 (66,7%) pts (mean number ? 5,3 ± 4,2); 2) the clinical manifestations of APS were noted in 6 (100%) pts, among them: 4 (66,7%) had definite APS, 2 (33,3%)? probable APS and no one had dubious APS; 3) the clinical manifestations of APS, such as thrombosis (arterial and venous, deep and superior) had 2 (33,3%) pts, migraine?5 (83,3%), thrombocytopenia? 5 (83,3%), stroke ? 2 (33,3%), livedo reticularis? 4 (66,7%) and ulcers of extremities? 1 (16,7%) pts; 4) titers of both antibodies were medium and high.

Conclusion We found that IgG aCL and IgG anti-b2GPI, especially their combination is one of the most important tests for APS in the pregnant women's population with the history of spontaneous abortions, especially among the women with habitual abortion; simultaneous production of both antibodies correlated with severity of clinical manifestations of APS. The discovery of IgG anti-b2GPI make the clinical manifestations of APS more severe.

FRI0177 THE SPECTRUM OF CLINICAL MANIFESTATIONS OF ANTIPHOSPHOLIPID ANTIBODY SYNDROME IN THE GENERAL HOSPITAL

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Background APS is recognised with growing incidence in many fields of medicine. It is clinically and immunologically diverse condition and may affect any organ of the body and display a broad spectrum of manifestations. The majority of published studies have been reported from a tertiary referral hospitals. We

decided to study the incidence and clinical spectrum of APS in a general hospital.

Objectives To examine the spectrum of clinical manifestations of antiphospholipid antibody syndrome (APS) in the acute general hospital of the southern area of Israel.

Methods Clinical records of patients who were discharged with diagnosis of APS during the years 1990–2000 were reviewed.

Results A total of 22 patients fulfilled criteria of APS (accordingly to Asherson's criteria, 1988) with 38 clinical events. Primary APS was found in 15 patients and secondary in 7 patients. There were 19 female and 3 male, mean age was 42.1 years (from 29 to 56). Most of the patients (20 out of 22) were diagnosed after 1995, showing increased awareness of this syndrome among the staff.

16 thrombotic events occurred: 6 stroke (27%), 4 acute myocardial infarction (18%), 3 venous thromboembolic event (13.6%), 3 recurrent abortion (13.6%). 32 nonthrombotic events were found: 8 headache (36.3%), 6 thrombocytopenia (27%), 3 skin rashes (13.6%), 1 amaurosis fugax (4.5%), 1 catastrophic APS (4.5%) 1 progressive supranuclear palsy (PSP) (4.5%).

All patients suffering from acute myocardial infarction were patients with SLE, thus showing that APS is an additional risk factor for ischaemic heart disease in such patients.

Headache was an additional symptom in the patients, diagnosed as having APS – in all 6 patients with stroke, one with amaurosis fugax and one with venous thromboembolic event.

Patient with PSP features had magnetic resonance imaging of brain and blood test results characteristic to APS (our unpublished data).

Conclusion The study shows that APS is not an uncommon disease. It is important for the internist and the specialist to be aware of the clinical manifestations of APS. Its inclusion in the differential diagnosis of arterial or venous thrombosis with or without thrombocytopenia in patients is obligatory at the present time.

FRI0178 FOLLOWUP OF PLATELET ACTIVATION IN A PATIENT WITH ANTIPHOSPHOLIPID SYNDROME UPON TIROFIBAN TREATMENT

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Background Patients with primary or secondary antiphospholipid syndrome (APS) often suffer from stroke leading to high degree of disability. Though it is well known that phospholipid antibodies induce a procoagulatory scenario, antibody status does not well characterise patients at risk. Using transcranial Doppler ultrasound of intracerebral arteries we could detect microembolic signals correlating well with phospholipid antibody titer as well as with history of stroke. In these patients we could also demonstrate elevated levels of platelet activation markers (p-selectin) as well as increased platelet leukocyte aggregation. Tirofiban is a potent, highly selective and reversible inhibitor of platelet gpIIb/IIIa receptor which binds fibrinogen on platelet surface.

Objectives We treated a patient with primary APS and refractory transitory ischaemic attacks with tirofiban and detected microembolic signals as well as platelet activation markers and platelet-leukocyte aggregations (PLA).

Methods In fresh venous citrate-anticoagulated whole blood expression of gp Ib (CD41), gp IIb/IIIa (CD42b), fibrinogen binding and p-selectin (CD62p) was analysed using a flowcytometric double staining method. In parallel we detected PLA by determining percentage of platelet marker/leukocyte marker (CD42b/CD45) double positive leukocytes.

Results Upon Tirofiban treatment we found a reduction of platelet activation markers (p-selectin, fibrinogen binding, CD63). Under steady state conditions with tirofiban expression of platelet activation markers and platelet leukocyte interaction normalised completely compared to normal healthy donors. The morning after each infusion there was a rebound phenomenon, which could also be observed in platelet activation markers and PLA. This rebound phenomenon could be reproduced upon sequential administration of tirofiban in parallel with rate of microembolic events.

Conclusion In a patient with primary APS therapeutic intervention with tirofiban, a reversible inhibitor of platelet gpIIb/IIIa receptor, induced a clinical improvement of transitory ischaemic attacks. In parallel with clinical improvement there was a modulation of microembolic signals as well as platelet activation markers and PLA. Flowcytometric measurement of platelet activation can be a useful tool in monitoring platelet hyperreactivity in APS upon therapeutic intervention.

FRI0179 NAILFOLD CAPILLAROSCOPY IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS WITH AND WITHOUT ANTIPHOSPHOLIPID SYNDROME

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Background Nailfold capillaroscopy is able to evaluate microcirculatory damage in many different diseases and a high prevalence of capillary abnormalities has been reported in systemic lupus erythematosus (SLE).

Objectives Considering that the vascular involvement is of primary importance in antiphospholipid syndrome (APS), it can be of interest to examine the capillaroscopic features of those SLE patients having secondary APS.

Methods 29 SLE patients entered the study, 13 had secondary APS (M/F = 1/12; mean age = 45.5 yrs; mean disease duration = 5.85 yrs) while the other 16 patients (M/F = 1/15; mean age = 36.6 yrs; mean disease duration = 7.2 yrs) had no clinical or laboratory signs of APS. There were no significant differences regarding the number of ARA criteria or ECLAM and SLEDAI scores between the two groups.

Each patient underwent nailfold capillaroscopy to detect the following abnormalities: morphological alterations of capillaries, variability of capillary loop length, presence of microhaemorrhages, irregular distribution of capillaries and sludging of blood. Moreover to score these changes a semiquantitative rating scale was adopted, according to previous studies.

Results Although not statistically significant, more frequent variability of capillary loop length (77% vs 44%), presence of microhaemorrhages (23% vs 12.5%), sludging of blood (23% vs 12.5%) as well as capillaroscopic score >1 (77% vs 44%) were found in patients with SLE/APS respect to those with SLE alone.

However in our SLE/APS patients the presence of capillaroscopic microhaemorrhages was significantly associated to thrombocytopenia ($p < 0.034$) and the finding of shorter capillary