Summary And Conclusion

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Antiphospholipid antibodies (APAs), namely , lupus anticoaglant & anticardiolipin antibodies are acquired autoantibodies that can occur in many pathological conditions as connective tissue diseases (S.L.E & Rheumatoid arthritis) & in infectious disease (acquired immunodeficieny syndrome , infectious mononucleosis & in chronic infections as leprosy) as well as drug induced (Fansidar , Hydralizine , Streptomycin , Quindine , Procainamide) .

Patients with APAs are prone to repeated episodes of both arterial & Venous thrombosis , Cardiomyopathy , thrombocytopenia , Fetal losses , renal failure , neurological & Skin manifestations .

The primary antiphospholipid antibodies syndrome refers to the presence of the above clinical manifestations without evidence of an associated autoimmune disorders .

The aim of our work is to shed light on the prevelance of APAs & the role played by these antibodies in cerebral ischemia . Our study was conducted on 50 patients with cerebral ischemia (Cerebral thrombosis , transient ischemic attacks) as well as 15 healthy controls , patients were classified into 2 groups :

- Group 1 :

It included 30 patients (10 males & 20 females) with no evidence of any risk factor that can predispose to cerebral ischemia e.g hypertension , D.M , hyperlipoproteinemia .. etc ..

- Group 2 :

It included 20 patients (9 males & 11 females) They harbour one or more risk factors for cerebral ischemia .

- Control Group :

It included 15 apparently healthy controls (5 male & 10 females)

The following was performed to every subjects ;

1- Thorough history & clinical examinations .

2- Radiological studies (C.T , MRI , Duplex Ultrasonography)of the brain .

3- Laboratory investigations which includes ;

A) Antiphospholipid antibodies ;

- **Anticardiolipin antibodies (IgG , IgM)**
- **Lupus anticoagulant (LA)**

B) Prothrombin time (PT) & activated partial Thromboplastin time (APTT) .

C) Platelets Count .

D) Plasma glucose .

E) Lipid profile :

- **Total serum cholesterol (T . Chol)**
- **Low density lipoprotein Cholesterol (LDL)**
- **High density lipoprotein Cholesterol (HDL)**
- **Serum triglycerides (T.G)**

We found the APAs to be highly prevelant among our stroke patients , this may be attributed to the hight senstivity of modern techniques used.

Patients with APAs syndrome are likely to be females & are younger than the general stroke population . Most of our stroke patients were having cerebral thrombosis , where as patients with transient ischemic attacks (TIA) constituted only a small minority . The APAs were more prevalent in cerebral thrombosis than in TIA .

Stroke patients who were found positive for APAs were susceptible for frequent stroke attacks than those who were found negative for APAs.

Other CNS manifestations were reported in our patients e.g seizures , Chorea , migraine , myelopathy , these manifestations were more frequently reported in APAs positive than in APAs negative patients .

Extra Cerebral manifestations were reported among our stroke patients e.g Arrhythmia , myocardial infarction , Chronic renal failure , Abortion , deep vein thrombosis as well as thrombocytopenia.

All these manifestations were much more frequently reported in APAs positive than in APAs negative patients .

IgG anticardiolipin antibodies was the most frequent type of APAs to be detected in the present study , followed by lupus anticoagulant (LA) & the IgM anticardiolipin .

In the present study we evaluated the APAs as being a significant risk factor for cerebral ischemia ; we could detect the APAs in 54% of our stroke patients using coagulation test (APTT) & solid phase enzyme immunoassay , we have also detected a significant increase in the incidence of APAs in all patients groups when compared to the controls , besides that there was a significant correlation between the APAs & the occurance of cerebral ischemia .

So , we reached a conclusion that the APAs can be considered as a significant risk factor for cerebral ischemia .

The present study have also shown that APAs can be considered as an independent risk factor for cerebral ischemia , that was inferred from the observation that ; the APAs were much more frequently detected in group I of patients (those who are devoid of any other risk factors for cerebral ischemia) than in group II of patients (those who harbour one or more of other risk factors) , besides that , no significant correlation was detected between the APAs & the other risk factors (hypertension , DM , mitral stenosis , hyperlipoprpteinemia , DVT , oral contraceptives)

So , we can conclude that the presence of APAs should be investigated in any case of cerebral ischemia without any other detectable risk factor & can be considered as an important prognostic marker in this disorder.