

## SUMMARY AND CONCLUSION

Idiopathic thrombocytopenic purpura (ITP) is a common haemorrhagic syndrome characterized by reduced number of circulating platelets, normal to increased number of megakaryocytes and accelerated platelet destruction .

To establish the autoimmune nature of this disorder and to find out the pathogenetic significance of serum anticardiolipin antibodies in this disease , fifty patients suffering from ITP (twenty- five with acute ITP and twenty - five with chronic ITP) and also, age- and sex - matched twenty healthy children serving as controls had been subjected to the following :

1. Detailed history taking :

Onset, course, duration and history of bleeding, vaccination or fever .

2. Full medical examination :

Skin lesions, hyperpyrexia, organomegaly (lymph nodes, liver and spleen) .

3. Laboratory work :

a) Routine investigations :

Bleeding time, haemogram with total leucocytic and differential counts .

b) Haematological investigations :

Platelet count, bone marrow aspirate and Coombs' Test ( direct and indirect ) .

c) Immunological investigations:

1. Estimation of serum IgG, IgA, IgM, C3 and C4 using

Radial immune diffusion .

2. Demonstration of anti-CMV antibodies of the IgG and IgM types using ELISA technique .
3. Detection of circulating immune complexes using ELISA technique .
4. Detection of antinuclear, anti-ds-DNA, non-organ specific and anti-thyroid antibodies by indirect immunofluorescence technique .
5. Detection of serum antiplatelet antibodies by immunofluorescence technique .
6. Detection of Anticardiolipin antibodies of the IgG and IgM types using ELISA technique .

Statistical analysis of the results showed ;

All cases studied had prolonged bleeding time. Clinically ; fever, spontaneous purpura and bleeding were statistically more prevalent in acute group as compared to both chronic and control groups .

The haemoglobin level was significantly lower in both patient groups as compared to the controls , also , it was significantly lower in acute ITP patient group as compared to chronic ITP patient group. The mean total leucocytic count and absolute eosinophilic count were significantly higher in both patient groups as compared to the control group , also , they were significantly higher in acute ITP group as compared to chronic ITP group .

The mean platelet count was significantly lower in both patient groups as compared to control group, also, it was significantly lower in acute ITP group as compared to chronic ITP group.

Serum IgG and IgM levels were significantly higher in both patient groups as compared to control group, but there was no significant change in serum IgG or IgM in acute ITP group as compared to chronic ITP group.

There was insignificant change in serum IgA, C3 or C4 levels in patient groups as compared to control groups.

The anti-CMV IgG results were significantly higher in both patient groups as compared to controls, also, anti-CMV IgM results were significantly higher in both patient groups as compared to control group.

The results of non-organ specific autoantibodies showed insignificant difference in both patient groups as compared to each other.

Anticardiolipin - IgG level was significantly higher in both patient groups as compared to control group. While, anticardiolipin IgM and circulating immune complex levels were insignificantly different in both patient groups as compared to control group.

As many as 76% of acute ITP patients and 80% of chronic ITP patients were positive for antiplatelet antibodies.

The correlations found in the results were between the platelet count and haemoglobin concentration, absolute

eosinophilic count , serum IgM , serum IgA , serum C3 and serum C4 levels .

Hence , we could conclude that;

ITP in Egyptian children may be an autoimmune disease accompanied by the presence of serum antiplatelet antibodies , anticardiolipin antibodies , circulating immune complex and even non-organ specific autoantibodies .

A palpable spleen strongly negates the diagnosis of chronic ITP in children .

The rising specific anti-CMV IgG titer is more useful in screening for active CMV infection than the specific anti-CMV IgM titer .