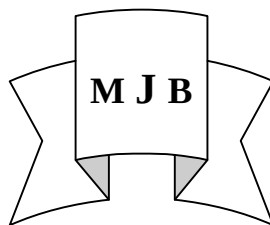


Idiopathic Thrombocytopenic Purpura and Diabetes Mellitus

Al'a Hussein Haider Al-Hulli Hamid Majeed Thahab

Dept. of Medicine, College of Medicine, Babylon University

**Case Report**

A 26 years old man presented at April 2004 with petechiae of both upper and lower limbs associated with polyuria, polydipsia and weight loss. Two days later he consulted a dermatologist who diagnosed him as idiopathic thrombocytopenic purpura (I.T.P.) and treated him with (prednisolone tablet 30 mg/day).

On examination the patient looked ill, with multiple petechiae and purpuric spots, no lymphadenopathy or hepatosplenomegaly

Blood exam. showed: Hb 12 gm/dl, PCV 37, ESR 45, Platelet count $10,000/\text{cm}^3$, fasting blood sugar was more than 12 mmol/L on three successive days, blood urea 6 mmol / L, Urine showed +++ sugar. bone marrow examination showed increased number of megakaryocyte.

He was treated with insulin lent 20 I.U. at morning and 10 I.U. at night with soluble insulin 10 I.U. at morning and 5 I.U. at night also the dose of

prednisolon was decreased to 20mg/day, after two weeks petechiae disappeared , platelet count reached $200,000/\text{cm}^3$ and FBS became 5.6 mmol/L.

On follow up of the patient the platelet count continued to be normal and steroid had been tapered gradually and stopped but the patient still had high blood sugar that required insulin therapy for control

Discussion

Idiopathic thrombocytopenic purpura is characterized by the presence of autoantibodies, often directed against platelet membrane glycoprotein, IIb - IIIa and causes the premature removal of platelets by the monocytes-macrophage systems.

Occasionally antigen-antibody immune complexes adhere to platelets at their Fc-receptor resulting in their premature removal from circulation. In children, I.T.P. often present 2 - 3 weeks after viral illness with the sudden onset of purpura. In adult I.T.P. more commonly affects female and has

insidious onset and it is unusual for them to be a history of preceding viral infection.

The evidence that viral infection might cause some forms of type I diabetes mellitus is derived from studies where virus particles known to cause cytopathic or auto-immune damage to B-cell have been isolated from the pancreas. Several viruses have been implicated including infection with mumps, coxsackie B4, retroviruses, rubella (in utero), cytomegalovirus and Epstein-barrvirus, although the putative mechanisms by which they induce type I diabetes differ.

I.D.D.M. is associated with autoimmune diseases like Addison's disease, pernicious anemia, etc. I.T.P is not usually mentioned to be associated

with I.D.D.M. This patient shows that there is possible association between I.D.D.M and I.T.P probably because the initiating factor is viral infection for both and to be documented require virological study which is not available at the present time.

References

1. Christopher Haslett, Edwin R. Chilvers, Nicholas A. Boon, Nicki R. College, John A.A. Hunter: Davidson's principles and practice of medicine, 19th edition, 2002, 948,653
2. Atkinson MA, Eisenbarth G.S , lancet 2001; 358: 221.
3. Stephan F., Cheffi MA, Kaplan C, Maillet J, Novara A, Fagon J, Bonner F, AMI Med. 2000, 108, 554. PMID: 10806284.