**Glanzmann’s Thrombocytopenia: A Case Report**

**Abstract**

Glanzmann’s thrombocytopenia is a platelet disorder in which platelets have qualitative or quantitative deficiencies of the fibrinogen receptor α2bβ3. Most cases are hereditary but can be acquired also. This disorder is named after Dr. Eduard Glanzmann, who first described it in 1918. Its global prevalence is estimated to be one in a million with higher prevalence rate in population where consanguinity marriage is common. It has good prognosis with proper supportive care.

**Case Summary:** A 17-year male patient had come with complaint of severe epistaxis randomly for hours in a known case of Glanzmann’s thrombocytopenia which was diagnosed 10 years ago. With epistaxis he also had complaints of weakness in upper limbs and gastrocnemius muscle. Earlier when he had nose bleeding he also had complaints of weakness in upper limbs and gastrocnemius muscle. Earlier when he had nose bleeding he also had complaints of weakness in upper limbs and gastrocnemius muscle.

**Diagnosis:** Glanzmann’s thrombocytopenia

**Treatment:** Inj. Etamsylate 500mg BD, Inj. Hemocoulaagase 1IU OD. Inj. Tranexamic acid 500mg OD, Tab. Vitamin C BD, Tab. Calcium gluconate 500mg BD, Sp. Vitamin D3 and was transfused with PCV (A+) total 12 pint (200ml) and platelets 2 pint (200ml)

**Keywords:** Glanzmann’s thrombocytopenia, Epistaxis, Tranexamic acid, Congenital, Platelet Disorder.

INTRODUCTION

Glanzmann’s thrombocytopenia is a rare blood disorder that’s expressed by long time and unprompted blood loss that starts occurring from the instant person is born. Person with Glanzmann’s thrombocytopenia happens to have bruises easily, have expected epistaxis, and also bleeding from the gums. They have frequent violet or red spots on their skin because of bleeding under the skin or swelling that happens due to bleeding within tissues. Glanzmann’s thrombocytopenia is also responsible for delayed blood loss due to injury, surgery, or trauma. Female born with this disorder may also have delayed and often abnormally heavy menstrual flow. Suffered female also have high chances of extreme blood loss during pregnancy and accouchement. Glanzmann’s thrombocytopenia was first documented in 1918 by Dr. Eduard Glanzmann, who described it as a novel platelet disorder that have defective clot retractions and atypical appearances on stained film. It has since been more specifically described as an autosomal recessive genetic disorder in which the platelet count is normal or subnormal, the bleeding time is prolonged, and platelet aggregation is deficient or absent. Due to this deficiency of platelet function it manifests as a bleeding disorder characterized by mucocutaneous haemorrhage of varying severity.

Glanzmann’s thrombocytopenia is a rare disorder but is more likely to occur in consanguineous population where intermarriage is common like Iraqi Jews, French gypsies and Jordanian nomadic tribes. It is a non-curable disorder and patient suffering from this disorder have to take medication for preventing excessive blood loss from birth till death. Most cases of this disorder are hereditary but acquired Glanzmann’s thrombocytopenia also occurs due to an autoantibody against the platelet fibrinogen receptors. Confirmatory diagnostic test for this disorder if flow cytometry and presence of monoclonal antibodies.

CASE REPORT

A 17-year male patient had come with complaint of severe epistaxis randomly for hours in a known case of Glanzmann’s thrombocytopenia which was diagnosed 10 years ago. With epistaxis he also had complaints of weakness in upper limbs and gastrocnemius muscle. Earlier when he had nose bleeding for it as a preventing measure, he plugs cotton in his nose but it causes him difficulty in speaking. In past also he had major complaints of epistaxis and it was more frequent in summer as compare to winter for which sometime he was transfused with blood. The patient is also underweighting with BMI of 16.2 and his diet is also imbalanced. His parents were not having a consanguineous marriage which is most in other cases of Glanzmann’s thrombocytopenia but his mother is suffering from epilepsy and father is suffering from hemiplegia (Right side) due to polio. Patient vitals were normal but his laboratory findings show that his haemoglobin levels (7.2g/dl), RBCC

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with multiple transfusions. Tranexamic acid can also be used as it help in stopping as well as preventing bleeding. Women suffering from this disorder has risk of high blood loss during menstruation so they can be suggested to take oral contraceptives as to preventive measure for menorrhagia. Patients suffering from these disorders should be educated not to take anti-coagulants drugs like aspirin, clopidogrel, warfarin, heparin as well as NSAIDS. It being a rare and incurable disorder but has a good prognosis with appropriate supportive care.

CONCLUSION

Glanzmann’s thrombocytopenia is congenital bleeding disorder caused by defect in integrin factor of platelet. Patient suffering from this disorder suffer from lifelong unexpected bleeding episodes. For management of this patient had to take platelet transfusion regularly as it has good prognosis when managed with appropriate supportive care and patient should be informed about not to take anti-coagulant drugs as well as before any surgery measures should be taken as having availability of platelet transfusion if uncontrolled bleeding occurs. Patient should avoid working with sharp objects and regularly visit hospital for follow up.

REFERENCES


