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Tirofiban-induced Profound Thrombocytopenia

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INTRODUCTION

Platelet glycoprotein IIB/IIIA antagonists are potent inhibitors of platelet aggregation; they block the common aggregation pathway and inhibit fibrinogen binding. These drugs have been increasingly used in the treatment of acute coronary syndrome and percutaneous coronary interventions. Thrombocytopenia is a potentially fatal complication.

CASE PRESENTATION

- A 57-year-old gentleman with a past medical history of coronary artery disease status-post multiple stent placement presented with acute onset chest pain.
- He was found to have non-STEMI and a coronary angiography revealed occlusion of the first marginal artery.
- The patient was previously on acetylsalicylic acid and clopidogrel and the decision was made to start Tirofiban.
- 16 hours after initiation of the latter medication, severe thrombocytopenia developed with a count of 1,000/L with gingival bleed and moderate ecchymoses.
- This led to holding Tirofiban and the initiation of Hydrocortisone 300mg daily by the intravenous route upon which the platelets increased gradually returning to 180,000/L on day five of the thrombocytopenia.

CONCLUSION

Tirofiban-induced severe thrombocytopenia is a serious complication particularly in the setting of coronary artery disease where an adequate balance between anti-platelet therapy is necessary to prevent bleeding, but more importantly prevent further stenosis.

REFERENCES

Rawala MS, Ahmed AS, Posina K, Sundaram V. Tirofiban Induced Thrombocytopenia: A Rare but Severe Adverse Effect. J Community Hosp Intern Med Perspect. 2020 May 21;10(2):171-173. doi: 10.1080/20009666.2020.1747783. PMID: 32850060; PMCID: PMC7426711.

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