



Anaesthesia Management Of Essential Thrombocytosis

Dr.Kamalraj.Kr^[1],Dr.Nagapriya.N^[2], Dr.Geetha Soundarya Udaya Kumar ^[3].

DR.KAMALRAJ.KR, FINAL YEAR POST GRADUATE IN ANAESTHESIOLOGY , SREE BALAJI MEDICAL COLLEGE AND HOSPITAL.

DR.NAGAPRIYA.N , FINAL YEAR POST GRADUATE IN ANAESTHESIOLOGY , SAVEETHA MEDICAL COLLEGE AND HOSPITAL.

DR.GEETHA, ASSOCIATE PROFESSOR IN ANAESTHESIOLOGY , SREE BALAJI MEDICAL COLLEGE AND HOSPITAL

Article Info

Volume 6, Issue Si3, July 2024

Received: 11 May 2024

Accepted: 19 June 2024

doi:

10.48047/AFJBS.6.Si3.2024.2877-2879

ABSTRACT:

Essential thrombocytosis poses unique challenges in anaesthesia management due to its potential complications related to platelet dysfunction and thrombotic tendencies. This systematic review examines current literature of anaesthesia strategies tailored for patients with essential thrombocytosis, focusing on perioperative thrombotic risk mitigation and optimal platelet management and selection of anaesthetic agents that minimize hemostatic impairment while ensuring adequate intraoperative control.

KEYWORDS: Anaesthesia, thrombocytosis.

INTRODUCTION:

Thrombocytosis is defined as a platelet count above 4.5 lakhs. Platelets are blood cell fragments that help with blood clotting.This condition can cause too much clotting , or not enough clotting.

CASE REPORT:

A 33 year old female weighing 48 kg was scheduled for microdebrider assisted turbinoplasty.All basic lab investigations were done.The platelet count was found to be high (18.6 lakhs), Hb – 11.3 WBC – 18,580. H/o thrombocythemia since 2 years on T.ASPIRIN 50mg and T.HYDROXYUREA 500mg tds

BONE MARROW BIOPSY done on 2022.

IMPRESSION – possibility of myeloproliferative neoplasm following essential thrombocythemia, Medical oncologist opinion obtained.They suggested to continue both aspirin and hydroxyurea and gave fitness for surgery.The patient and attendant were explained the risk.Patient was taken up for procedure under ASA 3. The surgery was performed under GA. Patient shifted to OT, standard monitors were connected and preop vitals were noted.BP – 120/80



mm hg, PR- 72/min, spo2- 98% in RA.

Patient was premedicated and induced with INJ.PROPOFOL 120mg and paralyzed with INJ.VECURONIUM 5mg. Plane of anaesthesia – O₂ + N₂O + sevoflurane + Vecuronium. The intra op and post op period was uneventful.

DISCUSSION:

Very few cases of patients with thrombocytosis presenting for surgery have been reported.The main concern for us as anaesthesiologists is the risk of thrombotic episodes (MI/pulmonary infarcts) and the risk of excess bleeding during peri-op period. Choice of anaesthesia depends on the preop platelet count and aggregation studies.Spinal/epidural is not contraindicated if investigations are within normal limits.A detailed H/O such episodes in the past must be sought

and the risks involved must be clearly explained to the patient. In our case, we were fortunate to not encounter any problems.

CONCLUSION:

Perioperative thrombocytosis needs to be evaluated and treated accordingly. Due to associated thromboembolic/bleeding risk, patients with thrombocytosis require thorough clinical assessment, haematological investigation, and subsequently appropriate perioperative management strategies.

REFERENCES:

1. Okada Y, Hino H, Nagahama H, Kinouchi H, Sakomoto M, Aoki T. Anesthesia in two patients with thrombocythemia. Masui. *Japanese J Anaesthesiol.* 1997;46:1470–3. [[PubMed](#)] [[Google Scholar](#)]
2. Kimura Y, Yamaguchi S, Nagao M, Mishio M, Okuda Y, Kitajima T. Anesthetic management of two patients with essential thrombocythemia. Masui, *Japanese J Anaesthesiol.* 2001;50:545–7. [[PubMed](#)] [[Google Scholar](#)]
3. Garcia FJ, Hernandez PJ, Garcia AC, Verdu TM. Subarachnoid block in a patient with essential thrombocythemia. *Anesth Analg.* 2005;101:300. [[PubMed](#)] [[Google Scholar](#)]
4. Meyer HH, Mlasowsky B, Ziemer G, Tryba M. Massive haemorrhage following multiple epidural punctures as a late complication in thrombocythemia. *Anasth Intensivther Notfallmed.* 1985;20:287–8. [[PubMed](#)] [[Google Scholar](#)]