



Safe Use of Thoracic Epidural Analgesia in Type 1 von Willebrand Disease: A Case Report

Bruna Araujo Silva, MD¹; Meir Douek, MD¹; Vandana Gupta, MD¹; Victor Polshin, MD¹; Andrey Rakalin, MD¹

¹Beth Israel Deaconess Medical Center. Boston, MA

INTRODUCTION

VWD is the most common inherited bleeding disorder. Concerns regarding hematoma often limit the use of epidural analgesia.

→ Current guidelines recommend maintaining vWF activity and Factor VIII levels above 50% during catheter placement and removal. (1)(2) But published experience in this population remains limited.

MATERIAL AND METHODS

→ Pre-procedural laboratory evaluation included serial measurements of vWF antigen, vWF activity, and Factor VIII levels.

→ Hematology recommendations were compatible with current guidelines with recommendation to use recombinant vWF for repletion if needed.

CASE REPORT

A 58yo man with Type 1 VWD, HTN, HLP, GERD, CKD underwent left laparoscopic (converted to open) radical nephrectomy with IVC reconstruction for renal cell carcinoma.

→ Preoperative labs: vWF antigen (140%), vWF activity (125%), and Factor VIII (316%).

→ Initial 15 hours: had bilateral rectus sheath blocks with 0.25% bupivacaine.

→ Following block resolution, thoracic epidural was placed at T7–T8 using a right paramedian approach. Bupivacaine 0.1%–hydromorphone infusion provided sensory coverage from T5–T12. Repeat labs: vWF activity (149%); Factor VIII (278%).

→ Daily coagulation panels were monitored while the epidural remained in situ.

→ The epidural catheter was removed on postoperative day three without complication.

→ The patient transitioned to multimodal systemic analgesia and was discharged home on postoperative day four with adequate pain control and no bleeding events.

DISCUSSION

Published experience with epidural anesthesia in VWD is limited primarily to case reports and small series, largely in obstetric patients with type 1, type 2 (including 2B), and rare variants, in whom pregnancy-associated hypercoagulability may partially offset bleeding risk. (3)(4)(5). Our non-obstetric case extends this limited literature, demonstrating that guideline-directed correction of vWF and factor VIII levels and multidisciplinary oversight can permit safe epidural analgesia outside of pregnancy. (3)

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