

Management of an Epidural with Cangrelor drip post MI

Authors: Elizabeth Gray, DO; Sirimas Lau, MD; Hanen Fernandez, DO; Morgan Ahola, OMS-IV; Turo Lecho, MD

Affiliated: OhioHealth, Columbus, Ohio

Introduction:

Neuraxial anesthesia is commonly used for effective postoperative pain control. No current guidelines exist on epidural removal when a patient is placed on a Cangrelor drip post-MI with an epidural in place.

Case Presentation:

A 65-year-old male, ASA 3, PMHx of rectal cancer S/P RT+CMT, T2DM, HLD, OSA, and depression

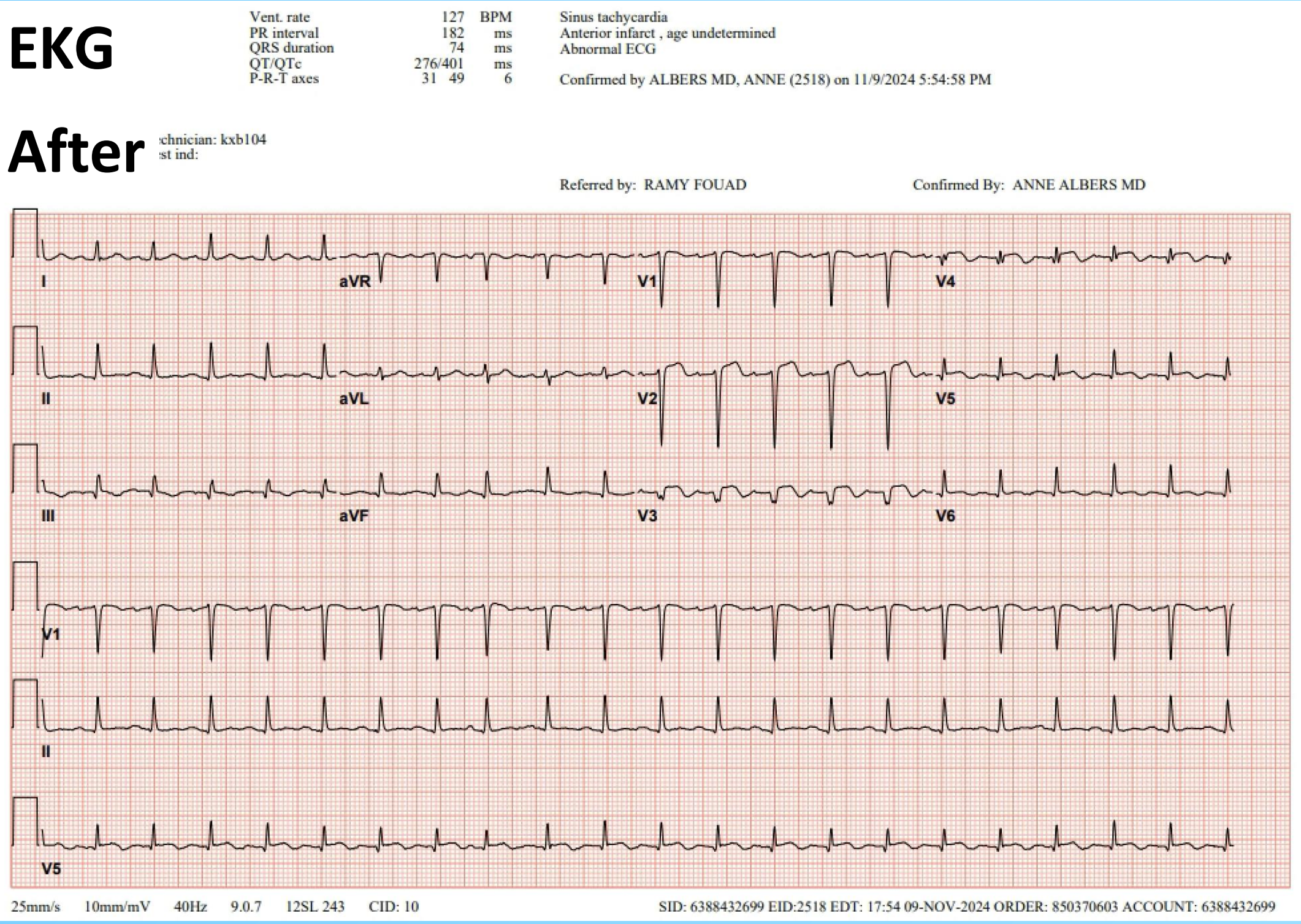
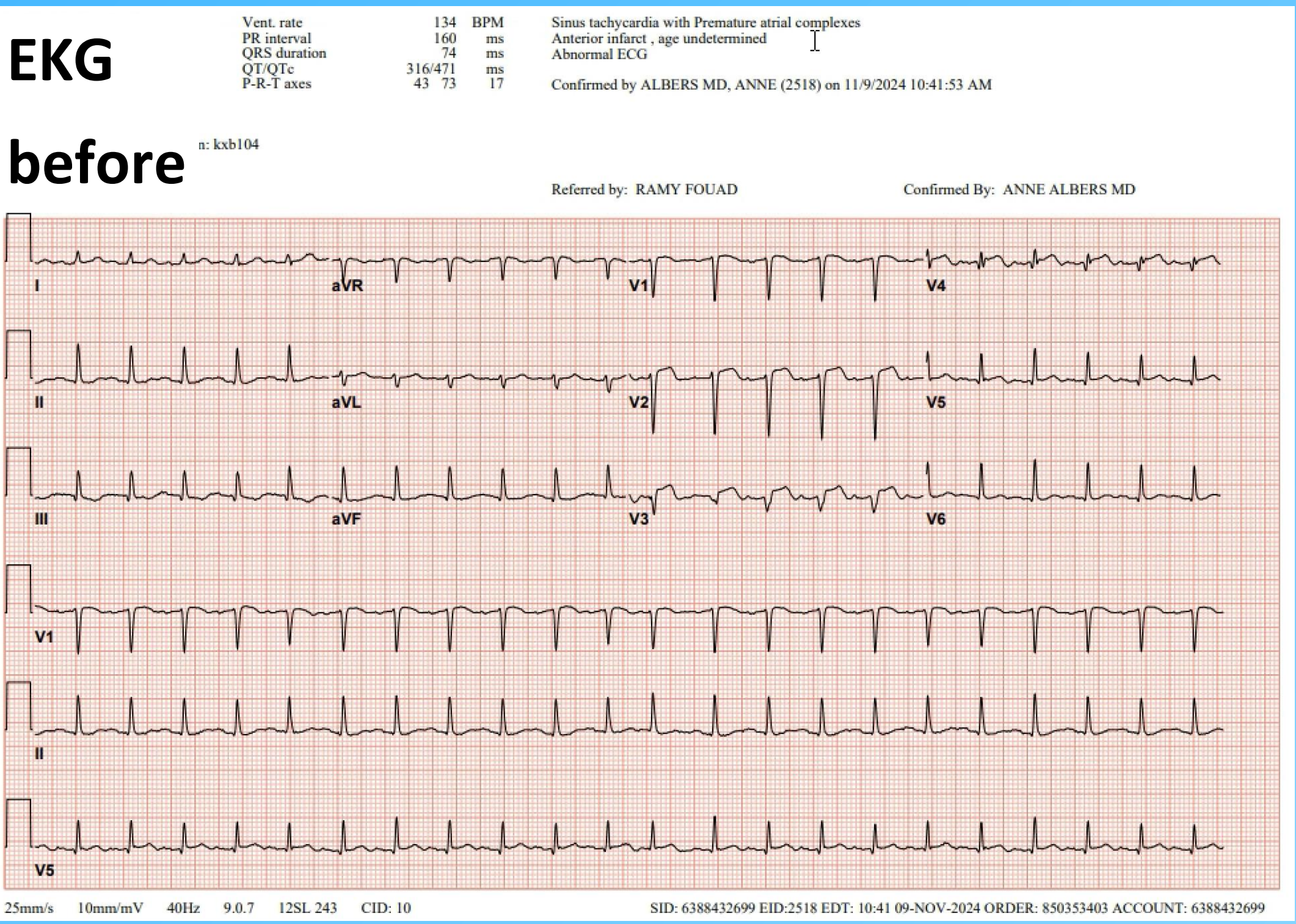
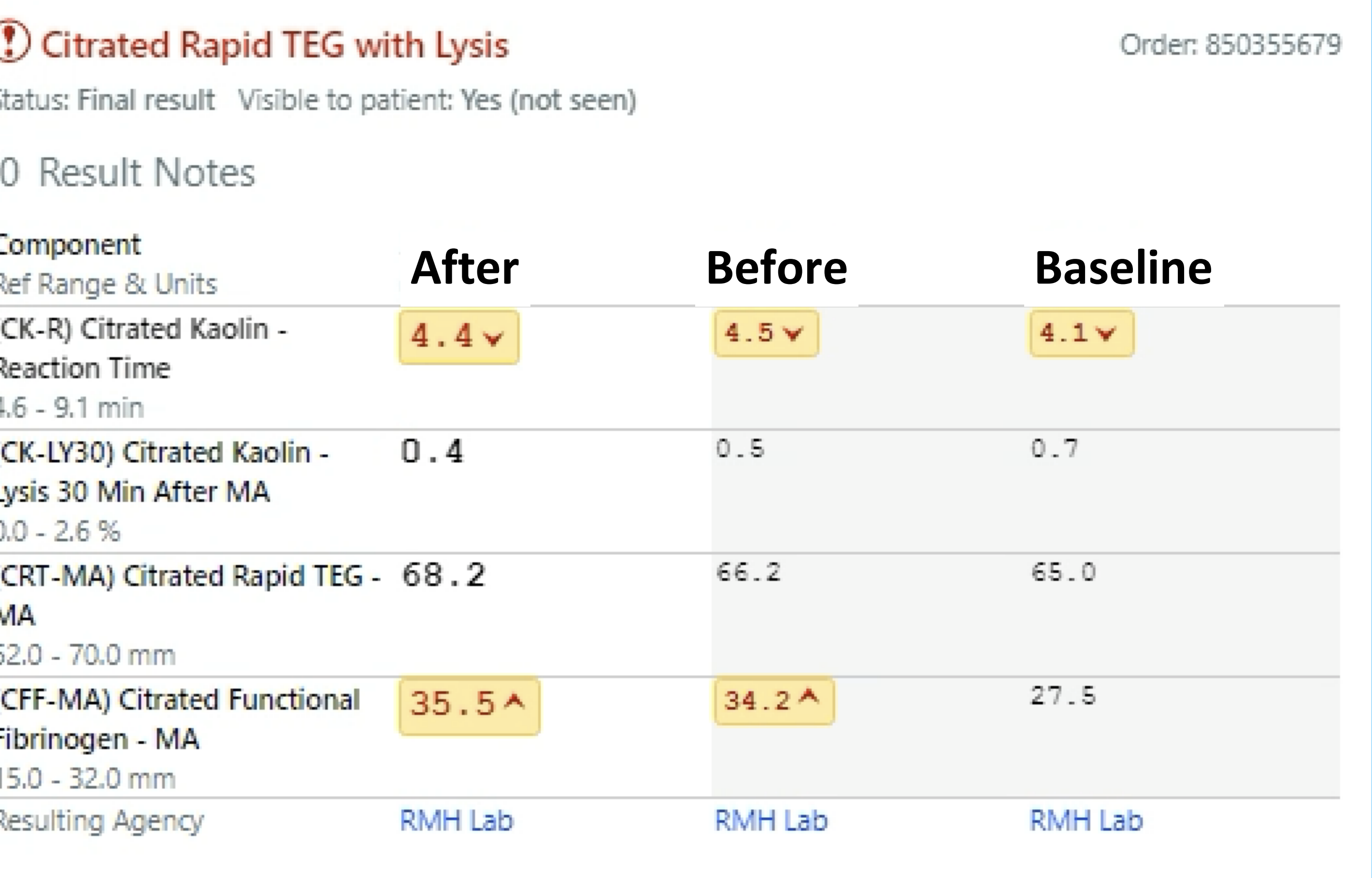
- Received an epidural preoperatively for pain control after exploratory laparotomy, excision mass, and splenectomy
- Current guidelines dictate the use of Cangrelor is contraindicated while an epidural is in place.

Baseline labs: INR was 1.2, platelets 459, PTT 30 and hemoglobin at 9.0

Discussion:

This case highlights a unique situation in which the initiation of a Cangrelor infusion was required in a patient with an epidural, emphasizing the need for guidelines on safe practices when anti-platelets are necessitated for patient care. This situation stresses the need for guidelines providers may reference for safe patient care.

“The decision was made to stop Cangrelor for 30 minutes and obtain a thromboelastography (TEG) and EKG”



What did we do after removal?

Q1 neuro checks were ordered the first 4 hours followed by Q2hr neuro checks for 8 hours

Outcome:

Normal neurological exam and patient denied any issues during pausation of the Cangrelor drip and epidural removal. He denied any back pain, fevers/ chills/ difficulty with moving his legs, decreased sensation, or inability to urinate.

Timeline

Date and time	Events
11/6/24 17:56	Admitted to surgical oncology with bowel preparation. RCRI score of 0, MET>4
11/7/25 08:11	Exploratory laparotomy with abdominal mass excision, splenectomy, omental flap and repair of small bowel serosa tear
11/7/25 10:54	Continuous epidural placed at the request of the surgeon for post operative pain management. Mid line approach at T9-10 level with Touchy 18 G. Patient tolerate procedure without complication
11/7/24 16:15	STEMI alert with ST elevation on anterolateral leads, bedside echo show apical ballooning suggesting a stress induce cardiomyopathy vs distal LAD disease. Transfer to Cath lab for PCI. Started on ASA and 7000 unit of heparin. Cangrelor drip started afterward
11/7/24 16:51	PCI with DES from the mid to the distal LAD and continue Cangrelor drip overnight with plan for Plavix load the next day
11/7/24 18:00	Transfer to SICU
11/8/24 06.30	Hgb drop 2 grams in the morning, decision to continue Cangrelor drip in case he needs surgery
11/9/24 07:22	Anesthesia team discuss with cardiologist about pausing Canglelor drip and removing epidural catheter. Due to risk of stent thrombosis, cardiologist recommend minimal pausing and serial EKG throughout
11/9/24 11.30	Cangrelor paused and TEG looked ok. Epidural Cath removed with no resistance and tip intact. Cangrelar resumed in 30 minutes

References:

1. Benzon H, Jabri R. Neuraxial anesthesia and peripheral nerve blocks in patients on anticoagulants. NYSORA website. <https://www.nysora.com>. Published February 1, 2022.
2. Stanford Medicine. Anticoagulation Guidelines for Neuraxial Procedures. Stanford Medicine website. <https://med.stanford.edu/content/dam/sm/pain/documents/neuraxial-procedure-v2-3.26.19.pdf>. Published March 26, 2019.

