

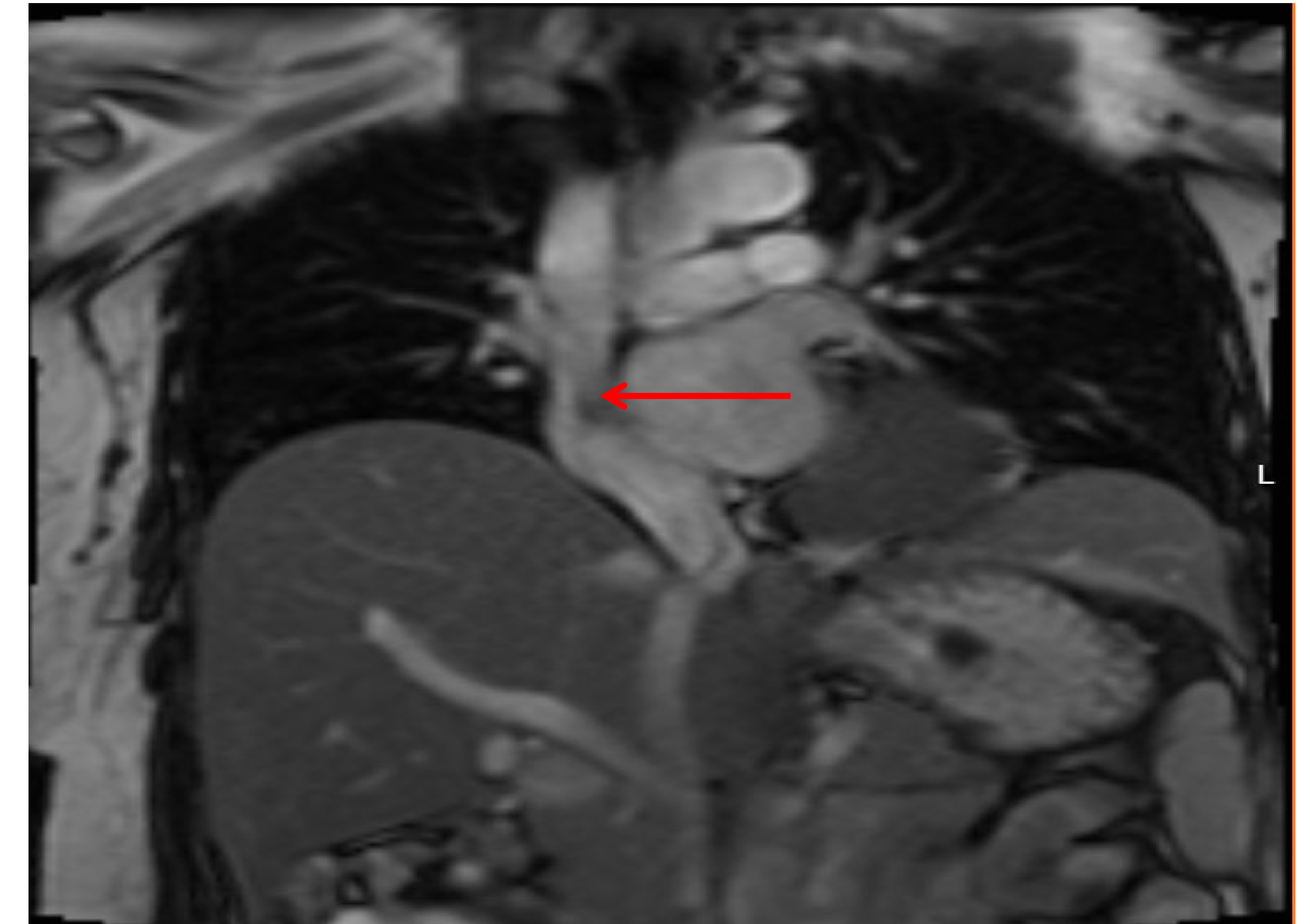
Parturient with New Diagnosis of Takayasu Arteritis and Severe Coarctation of the Aorta at 34 Weeks: A Case Report

Teshi Kaushik MBBS, Elizabeth Lange MD

Division of Obstetric Anesthesiology, Department of Anesthesiology, Emory University Hospital Midtown

Background

- Takayasu is a rare idiopathic granulomatous large-vessel vasculitis
- Incidence rates from 0.3 per million¹
- Most common presentation during pregnancy is hypertension, should be differentiated from other hypertensive disorders of pregnancy²
- Diagnosis can be confirmed with computed tomographic angiograms (CTA) and magnetic resonance angiograms (MRA).



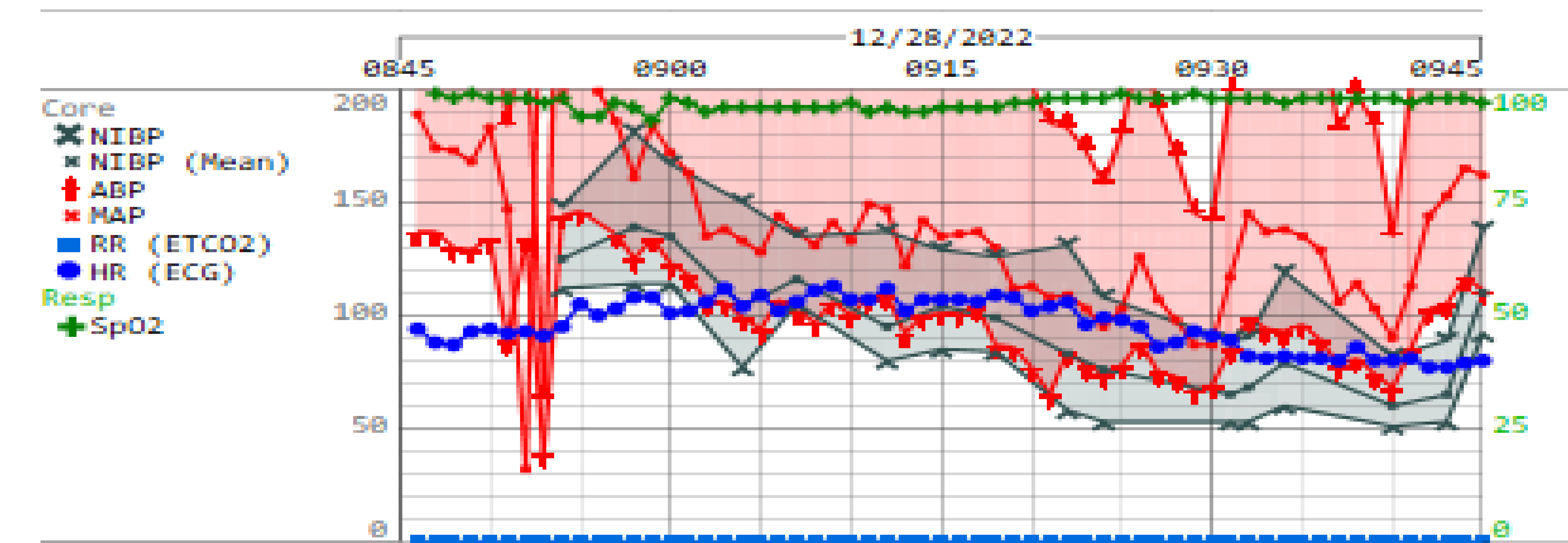
MRA chest w/o contrast showing coarctation of descending aorta.

Case Presentation

- 32-year-old G2P0 at 30 weeks gestation
- Discrepant severe range blood pressure (R: 160/120 and L: 220/120)
- TTE - abnormal doppler of abdominal aorta , grade II diastolic dysfunction, EF 65%
- MRA
 - stenosis of the ascending aorta (0.6cm at T10)
 - interrupted right subclavian artery
 - diffuse collateralization
- Uncontrolled blood pressure despite medical management

Cesarean Delivery at 36 weeks

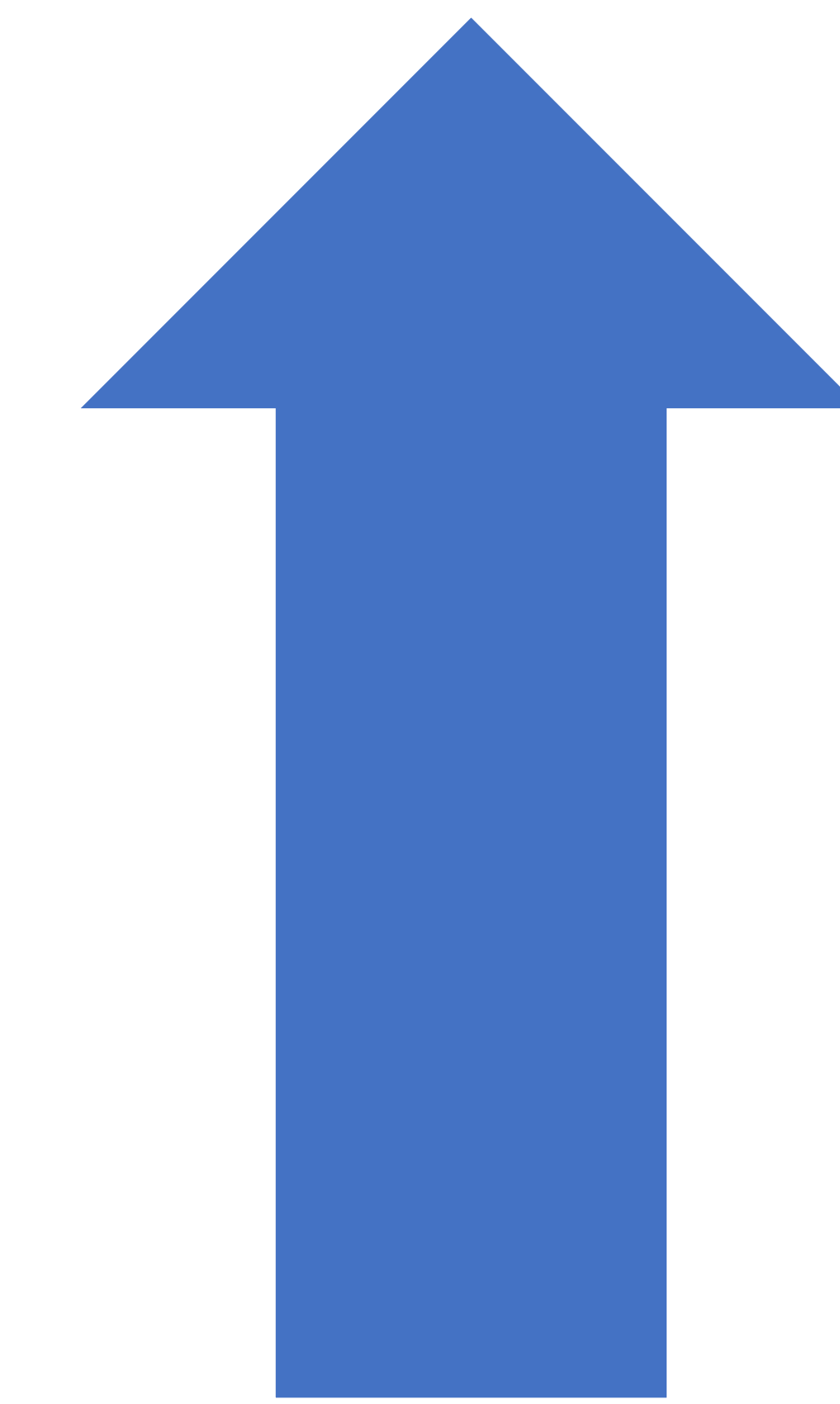
- Preinduction left radial arterial line (L: 300/120, R leg: 160/90)
- Nicardipine infusion
- Slowly dosed dural puncture epidural with alternative test dose
- Symptomatic hypotension when SBP < 200 on arterial line requiring norepinephrine drip
- Uncomplicated cesarean delivery with double set up for cannulation should dissection occur



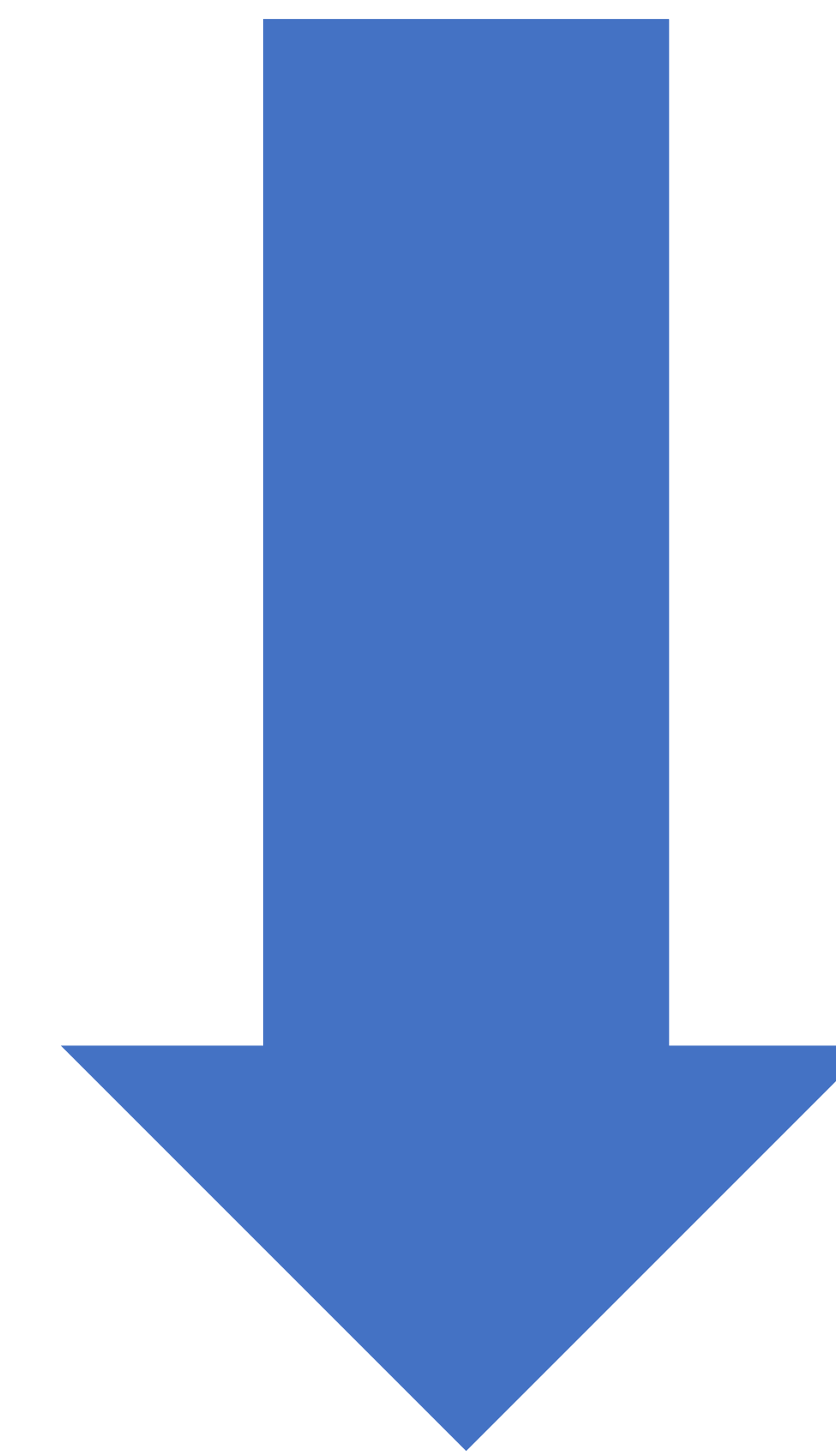
Intraoperative vitals. Left radial arterial line in red; right leg noninvasive cuff pressure in gray.

Discussion

- Optimization of pre and post coarctation blood pressure control is crucial
- Alternative test dose chosen, given risk of a positive epinephrine containing test dose precipitating acute heart failure from hypertension
- Fluid restrictive therapy with judicious use of vasopressors was chosen to avoid volume overload
- Double set up with immediate availability of multidisciplinary team including obstetricians, obstetric anesthesiologists, cardiac surgeon, cardiac anesthesiologist, perfusionist, and nursing staff



Hypertension in upper extremities can cause acute congestive heart failure and risk aortic dissection



Hypotension beyond the coarctation may compromise the uteroplacental circulation

References

1. Dua, AB. ACR Open Rheumatology 2021; 3:80-90.
2. Gupta, D. J Clin Anesth 2019; 58:18-9.

