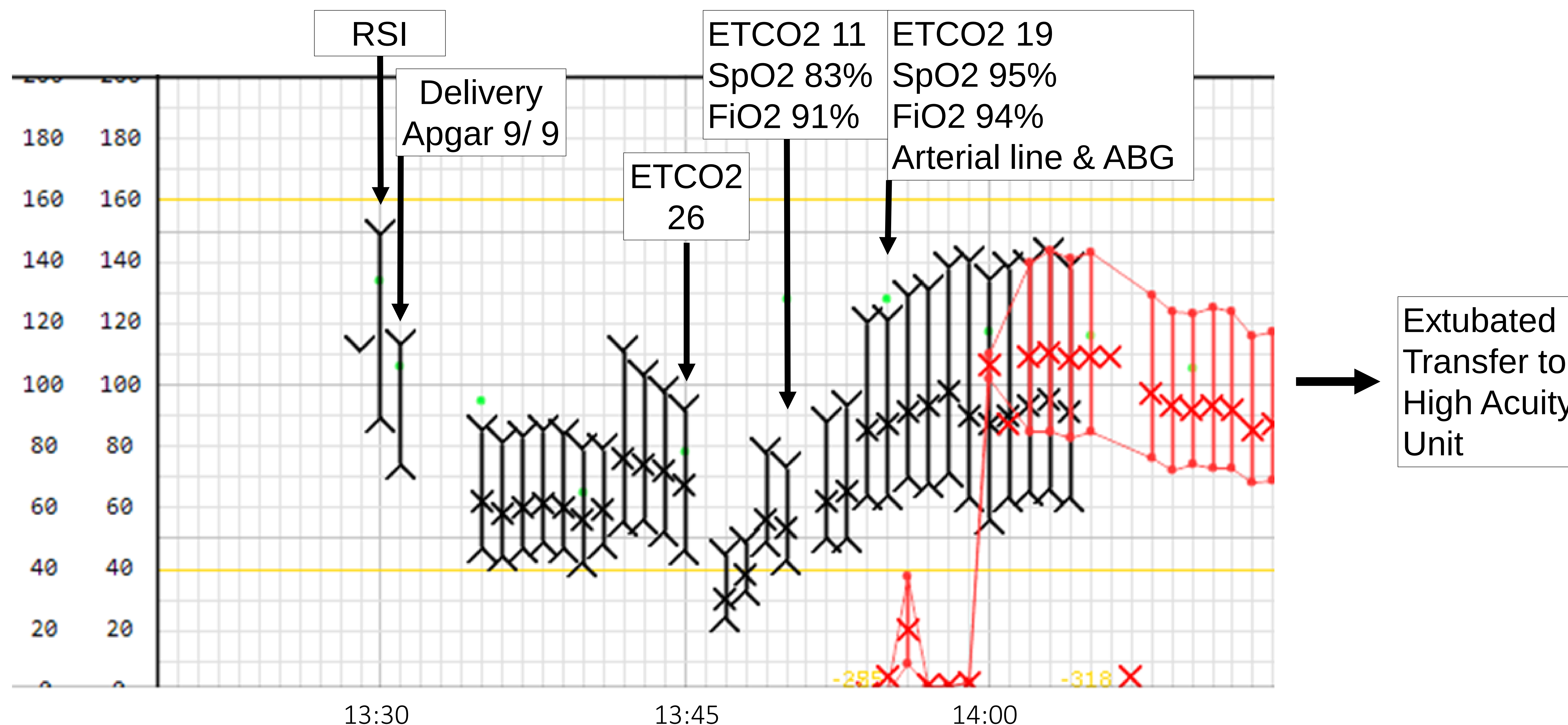


Suspected Venous Air Embolism as the Cause of Cardiovascular Collapse During Cesarean Section Under General Anesthesia: *a case report*

T Yang BMBS FANZCA, E Hindle MBChB BSc FRCA, H Parker MBChB FRCA FRCPC, A Chau MD MMSc FRCPC

CASE REPORT:

- Healthy 42 year old G3P2 presented in spontaneous labour at 40/40
- Intrapartum **umbilical cord prolapse** with **fetal distress** necessitated **emergency Cesarean** delivery



INTRAOPERATIVE COURSE:

- ETT position unchanged
- Equal air entry, no bronchospasm or rash
- Severe hypotension; phenylephrine and ephedrine boluses
- No evidence of hemorrhage
- Initial maternal ABG: 7.26/46/219/20.6/BE -6.3, Lactate 1.3

POST OPERATIVE INVESTIGATIONS:

- **ECG** showed T wave anomalies in V1 to V4 and inferior leads
- **Elevated Troponin I** 366 ng/L at 6 hours, 167 ng/L after further 9 hours (N < 51ng/L)
- **Transthoracic echocardiogram** showed a structurally normal heart, normal left and right sided function, no intracardiac shunts

OUTCOME:

- Full recovery and discharged on postoperative day 2
- Presumptive diagnosis of transient venous air embolism

DISCUSSION:

- **Venous air embolism** can occur whenever the surgical field is above the level of the heart
- **Patient positioning** may have resulted in a slightly downward gradient from the operative field to the level of the heart
 - The foam wedge under the legs which is designed to flex the hips and knees and reduce abdominal muscle tone might have contributed to this (Figure 1)
- **Point Of Care Ultrasound** could have assisted in the initial assessment of hypotension

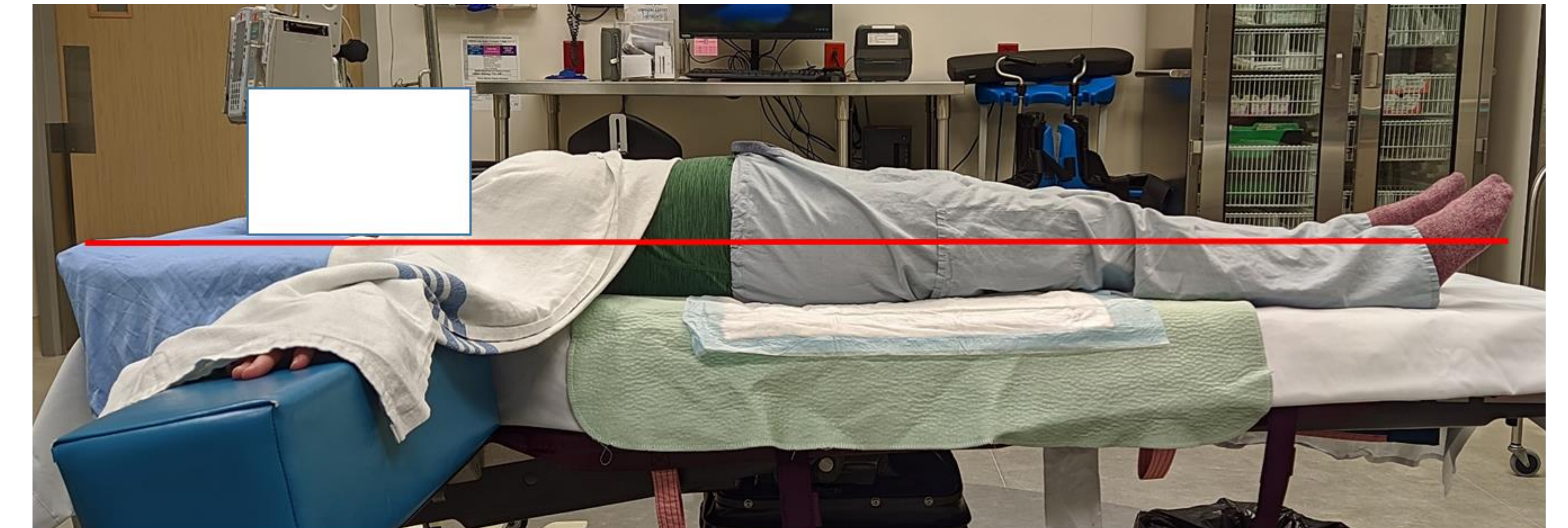


Figure 1. Top – no wedge. Bottom – with wedge.

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- Mirski MA, et al. Anesthesiology 2007;106:164-77.

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