

# A labouring opera singer with idiopathic thrombocytopenia: 'Its not over 'til the fat lady sings'

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A 37-year-old primiparous woman requested epidural analgesia (EA) for labour. She was fit and well and taking no medications. Labour was being induced and intravenous syntocinon was planned. Recent blood tests were normal except for platelet counts of 73, 79 and 72x10<sup>9</sup>/ml.

She worked throughout pregnancy, as a professional opera singer, preventing regular obstetric monitoring. An unsigned note to 'the anaesthetists' in her antenatal folder indicated her occupation and stated that 'the condition of her vocal cords is at all times of the highest priority...should anything need to be inserted into her trachea the utmost caution should be exercised...any direct contact with the vocal cords would be nothing short of a catastrophe'.

The following options were considered for labour:

1. Epidural analgesia
2. Spinal analgesia
3. Analgesia avoiding regional techniques.

Options for caesarean section were:

1. Epidural analgesia
2. Subarachnoid anaesthesia (SAA)
3. General anaesthesia (GA) with tracheal intubation
4. GA avoiding tracheal intubation.

The case was discussed with an obstetrician, haematologist and ENT surgeon. Further haematological investigation or treatment was considered unnecessary. The risk of laryngeal trauma from tracheal intubation was considered 'small'. The risks and complications of each anaesthetic intervention were discussed with the patient. **Dr TM Cook** is Consultant Anaesthetist and **Dr F O'Higgins** is Specialist Registrar in Anaesthesia, Royal United Hospital, Bath BA1 3NG

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We quoted risk of permanent nerve damage associated with regional techniques as 'more than 1 in 100 000' and risk of laryngeal trauma altering the voice at 1 in 100. A plan was agreed.

Labour analgesia was to be provided by controlled breathing, entonox and pethidine. If these failed SAA would be considered. For caesarean section, SAA was planned with a fine pencil point needle. After regional anaesthesia (RA) we planned 24 hours neurological monitoring to exclude spinal haematoma. For unavoidable GA tracheal intubation would be performed.

The patient laboured successfully for 12 hours using entonox and pethidine. At 6 cm cervical dilatation pain control became inadequate and involuntary pushing led to an oedematous cervix. This led to a further dilemma: SAA at this stage would preclude its use for caesarean section (which now seemed likely) for fear of an unpredictable block. Repeated platelet count was 95x10<sup>9</sup>/ml, so EA was carefully instituted. During placement the patient sang. Dilute bupivacaine and fentanyl provided excellent analgesia. At full cervical dilation, assisted vaginal delivery was attempted and failed. Caesarean section was performed using EA. The epidural catheter was removed. There were no sequelae and platelet count remained above 90x10<sup>9</sup>/ml.

EA had been requested for labour, but caesarean section was likely so plans for both were needed. RA is the most effective form of labour analgesia (Wulf, 1996). The risk of spinal haematoma associated with RA is less than 1 case per 100 000 (Stenseth et al, 1994), but how much this is increased by thrombocytopenia is unknown. The lowest

accepted platelet level for RA varies from 50–100x10<sup>9</sup>/ml (Lesser et al, 1986). Our (arbitrary) limit is 80x10<sup>9</sup>/ml.

This patient's career depended on her voice and even minor laryngeal trauma might be important. After tracheal intubation laryngography shows voice changes and granulomas may occur. Hoarseness affects up to 30% briefly, and 1% for up to 3 months (Jones et al, 1992; Kambic and Radsel, 1978). The dilemma involved balancing a small risk of a devastating complication against the greater risk of a less devastating one. A risk of 1 in 100 000 is difficult to comprehend, particularly for someone in pain. Full discussion of relative and absolute risks was required before agreeing a plan.

We preferred to avoid RA for labour; if needed, we would use fine blunt needles. For caesarean section, RA is safer than GA. SAA with a pencil point needle was planned. Should GA be needed, tracheal intubation was considered mandatory. Lifesaving techniques that avoid tracheal intubation have no role electively.

Our plan was flexible. When labour analgesia became inadequate, cervical oedema made caesarean section likely. Fortunately, platelet levels had increased and EA was now considered safe. All options were discussed with the mother, allowing us to provide reasoned, agreed yet flexible management. **HM**

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