

Addendum – Green-top Guideline 37b

August 2018

Addendum to Section 9: *Anticoagulant therapy during labour*

Section 9 of Green-top Guideline No 37b, (*Thromboembolic disease in pregnancy and the puerperium: acute management, April 2015*) addresses anticoagulant therapy during labour and delivery. It includes the recommendation that the epidural catheter should not be removed within 12 hours of the most recent injection of low molecular weight heparin (LMWH).

It has been brought to our attention that the reference cited with this recommendation (*Gogarten W, Vandermeulen E, Van Aken H, Kozek S, Llau JV, Samama CM; European Society of Anaesthesiology. Regional anaesthesia and antithrombotic agents: recommendations of the European Society of Anaesthesiology. Eur J Anaesthesiol 2010;27:999–1015*) states that when therapeutic doses of LMWH are employed then catheter removal should be delayed for *at least 24 hours*. These European guidelines do not specifically address the management of the obstetric patient.

Guidelines published by The Association of Anaesthetists of Great Britain & Ireland, The Obstetric Anaesthetists' Association and Regional Anaesthesia UK (2013) has a section on obstetric anaesthesia. This categorises the level of risk of epidural bleeding as:

- **“Normal risk”** for removal of the catheter more than 24 hours after a therapeutic dose of LMWH.
- **“Increased risk”** for removal between 12 and 24 hours.
- **“High risk”** for removal between 6 and 12 hours.

The risk of deep venous clot extension and embolism is particularly high around delivery and in the puerperium. The timing of catheter removal is a decision that should always be made in conjunction with a senior obstetric anaesthetist, and each case has to be assessed on an individual basis. Furthermore, the decision on timing should be clearly documented and followed by close post-removal patient surveillance.

We are grateful to the obstetric anaesthetist for bringing this to our attention and to the Royal College of Anaesthetists and the Obstetric Anaesthetists' Association for their advice on this matter.