Clinical guide for open fetal surgery to treat fetuses with open spina bifida during the coronavirus pandemic

31 March 2020

As doctors we all have general responsibilities in relation to coronavirus, and for these we should seek and act on national and local guidelines. We also have a specific responsibility to ensure that essential care continues with the minimum burden on the NHS. We must engage with those planning our local response. We may also need to work outside our specific areas of training and expertise and the General Medical Council has already indicated its support for this in the exceptional circumstances we may face: www.gmc-uk.org/news/news-archive/how-we-will-continue-to-regulate-in-light-of-novel-coronavirus

The following mitigation plan is proposed:

General principles

- Avoid unnecessary travel of pregnant women to University College London Hospitals (UCLH) or Leuven, Belgium.
- Triage suitability for open fetal surgery remotely by providing electronic information on patient eligibility and telephone calls from fetal surgery co-ordinator to patient and referring team.
- Consider availability of fetal surgery team members especially anaesthesia and operating department practitioner (ODP) staff, who may be limited by commitment to ventilated COVID-19 positive patients.
- Maternal condition takes precedence over fetal surgery. This is usual practice. If a pregnant patient is found to be COVID-19 positive, fetal surgery will not take place. Fetal surgery patients can develop mild respiratory complications following surgery (eg atelectasis, pulmonary oedema), which may increase the risk of spontaneous or iatrogenic preterm birth. If there is a suspicion with very mild symptoms, surgery may need to be delayed (but still within the appropriate window) until results of testing are known.
If fetal surgery is not feasible, the default position is to offer postnatal closure.

Advice for already operated patients

- All relevant Royal College of Obstetricians and Gynaecologists (RCOG) guidance will apply to patients who have had open fetal surgery; guidance is available on the RCOG website.
- Patients should attend their routine clinical ultrasound scans every two weeks at their local fetal medicine unit in accordance with the postoperative protocol.
- If patients experience COVID-19 symptoms, they should contact their local hospital in accordance with RCOG guidance.
- The fetal MRI should take place at 32 weeks locally where possible and results communicated to the fetal surgery team.
- For any patients who are currently abroad, NHS England will cover additional costs associated with COVID-19.

Three-stage contingency plan

Scenario 1: Assumes patient and Professor Jan Deprest can pass freely between UK and Belgium

- Open fetal surgery continues to be performed as currently, assuming that Jan Deprest can travel from Belgium to UK to perform surgery without travel quarantine restrictions and that patients can travel from UK to Belgium for surgery.
- Professor Deprest currently travels to the UK to support all surgeries. It is intended that this arrangement will continue, either in person or virtually via a video link.
- Multidisciplinary team discussions take place for all complex cases, including cases of anterior placenta. If it is confirmed that Professor Deprest’s physical presence is considered necessary as an additional expert to assist in a case and if he is unable to travel, the patient will be informed that postnatal repair is advised.
- It may subsequently be the case that a patient may be unable to leave Belgium and/or Professor Deprest may be unable to leave the UK, and unable to travel back for a few weeks due to travel restrictions or quarantine restrictions.
- Situation as at 23 March 2020:
  - Belgium discourages travel unless necessary.
  - The Belgian and UK borders are still open. There are limited trains and very limited flights. At this moment, travel for medical reasons (patients) or for people working across borders (doctors) is still allowed in France, Belgium and the UK.
Scenario 2: Belgian/UK borders are closed and do not permit passage of UK patients to Belgium

The UCLH team will continue to offer open fetal surgery to patients in the UK, all to be done at UCLH by the present team.

Patients will continue to be carefully triaged, and the MDT will discuss the patient’s suitability for surgery at UCLH. Both teams (UCLH and Leuven) will continue to be engaged in those discussions, as this can happen remotely. This may mean that for some complex cases, the decision is made that postnatal closure rather than open fetal closure should take place. Action will be taken to enable members to follow the operations remotely with streamed webcam video.

NHS England and the service have agreed that it would not be appropriate to bring non-UCLH NHS Foundation Trust staff into the service in key roles if they have not been involved in this surgery before: ie surgical team, scrub team. The service will, however, draw up a list of principles for how second-in-line staff members and midwifery/nursing staff from another theatre team within the trust can assist, if required, in supporting roles such as ODPs. There is currently contingency capacity in the team (fetal medicine and neurosurgery). If this cannot be provided, postnatal surgery will be recommended.

Scenario 3: Fetal surgery team unable to support the service due to widespread sickness, absence (quarantine) or a de facto lockdown with patient unable to travel

Surgery is delayed as much as possible until 25+6 weeks of gestation. If this is not feasible, then postnatal closure will be offered.

There is currently no evidence that fetoscopy surgery later in gestation is considered a valid alternative option if open fetal surgery is not available.