

## **Delivery mode choice adds to complexity of counselling for spina bifida**

The management of fetal spina bifida used to be relatively straight-forward. An uncommon condition with a high termination rate in many countries, the prenatal management for those continuing pregnancy involved, planning for postnatal surgery and often delivery by elective caesarean section. In the last 10 years much has changed due to the advent of fetal surgery and now Tolcher et al (BJOG 2018 xxx (1)) question the standard delivery practice.

The perceived benefits of elective caesarean are the prevention of traction on the placode, sac disruption and infection; however, systematic literature review does not seem to support this view. Neurological outcomes are no different whether babies are born vaginally or by the abdominal route (n=441; mean motor-anatomic difference -0.10 [-0.58;0.38]), even when only considering prelabour caesarean sections. In fact, vaginally delivered babies were less likely to have sac disruption [odds ratio 0.46 (0.23-0.90)] or require a shunt [odds ratio 0.37 (0.14-0.95)]. Although the authors rightfully point to the limitations of the included studies - the majority being retrospective, rather old, originating from the USA and none of them stratifying the condition by antenatal indicators of severity - this observation adds an additional point to the increasingly challenging counselling process faced by obstetricians when diagnosing spina bifida prenatally.

Prenatal diagnosis has now moved to an individualised severity assessment, characterising the lesion by its level, its impact on ventricular size and position of the hindbrain. Though an area of research it might be possible to neurologically assess the fetus and, for instance, demonstrate proper limb movement, which may be preserved by prenatal repair (Farmer DL, et al, Am J Obstet Gynecol 2018; 218: 256.e1-13 (2)). Additional information may be obtained by genetic analysis and by fetal magnetic resonance imaging (Mirsky et al, Fetal Diagn Ther 2015; 37:219-225 (3)), both of which should be offered. The increasing availability of fetal surgery, including in Belgium and recently the UK, adds complexity to the discussion and women should be offered referral to a fetal surgery centre when they consider this (Ovaere et al, Fetal Diagn Ther 2015;37:226-34 (4)). The option of vaginal delivery in women planning postnatal surgery, as raised by the authors, may also become pertinent to women undergoing fetal surgery as new techniques – though under debate (Belfort et al, Prenat Diagn. 2016;36:1161-6 (45) - may make vaginal delivery possible as well (Kohn et al, Obstet Gynecol. 2018;131:1062-8 (5)).

Modern counselling for fetal spina bifida therefore includes extensive evaluation, multidisciplinary and unbiased counselling, the consideration of prenatal surgery and discussion regarding the mode of delivery. Tolcher et al call to further research the role of vaginal delivery in this condition. We should indeed consider a trial in fetuses with a good neurological prognosis who have most to lose from traumatic labour and delivery. This will answer the question whether vaginal delivery is safe, if not overall to be preferred. As further information comes to light and practice develops, the complexity of counselling in fetal spina bifida is likely to increase. The consequence of this will be greater and more informed choice for women, which is one important aim of any prenatal diagnosis.