17th World Congress in Fetal Medicine

Inadvertent fetal exposure to methylene blue in the first trimester

Donaldson CJ, Sequeira Campos M, El-Sayed M
King's College London, London, United Kingdom

Objective

Fetal exposure to methylene blue in later pregnancy, when used to identify amniotic sacs in multiple pregnancy or facilitate the diagnosis of premature rupture of membranes, has been linked to adverse outcomes. However, evidence regarding the effects of methylene blue exposure during the first trimester is sparse, with only three individual case reports identified in the literature.

Methods

We report the case of one female, who underwent a laparoscopy and dye test in undetected early pregnancy.

Results

This 26-year-old female was investigated for a 20-month history of secondary infertility. Following an indeterminate HyCoSy, a diagnostic laparoscopy and dye test was booked. The procedure, including intra-uterine injection of methylene blue, was completed without complication and revealed patent fallopian tubes. Four weeks later, and before she could be informed of her results, the patient returned to the hospital following a positive home pregnancy test. Pregnancy was confirmed by a transvaginal ultrasound and the fetus was dated at eight weeks gestation, meaning it would have been three weeks and four days old at the time of the procedure. Despite the operation, the pregnancy was uncomplicated and at 40 weeks a healthy baby boy, weighing 3974g, was born. Three years on, he continues to develop well.

Conclusion

Exposure to potential teratogens can pose the difficult question as to whether termination should be recommended. As for the three cases identified in the literature, we report a good pregnancy outcome and thus seek to provide reassurance that methylene blue exposure in early pregnancy need not adversely affect the fetus.