A 30-year-old woman was seen at 24 weeks for a discrepancy between the symphysis-fundal height and the gestation by dates. Ultrasound examination revealed a twin pregnancy and showed the placentas to be implanted ‘back-to-back’ over what appeared to be a septum that extended from the uterine fundus to the cervix (Fig. 1). A bicornuate unicollis uterus was confirmed on MRI and revealed two divergent uterine horns separated by a deep fundal cleft, surrounded by myometrial tissue, containing a fetus within each horn (Fig. 2). A single cervix and vagina was visualised (Fig. 3), in keeping with a Class IVA Müllerian duct abnormality. At 33 weeks, an emergency caesarean section delivery was performed via two separate classic incisions into each corpus.

A spectrum of congenital uterine malformations is attributed to the abnormal fusion of the pair of Mullerian ducts or failure of the absorption of the uterine septum; bicornuate uterus is the most common. Spontaneous twin gestation in a case of bicornuate uterus is rare. MRI is a valuable adjunct to sonar, which can be diagnostically limited in the third trimester. MRI assists in delineating external uterine contour, characterising septal composition, endometrial/myometrial ratio and defining the subtype of Mullerian duct anomalies. Deep uterine bifurcation causes myometrial distortion denying each corpus the full complement of musculature, resulting in a higher incidence of reproductive loss, malpresentations, fetal dysmorphism, premature labour and perinatal morbidity and mortality as well as maternal death.

MRI influenced management in our patient by characterising the uterine anatomy, so allowing proper surgical intervention and planning the future management of pregnancies.

Corresponding author: M van Wyk (drmatthys@hotmail.com)

Matthys van Wyk is a final-year registrar in radiology at the University of the Witwatersrand, Johannesburg. Nasreen Mahomed, a specialist radiologist, has a particular interest in paediatric imaging. Mala Modi, former Head of Radiology at Chris Hani Baragwanath Hospital, is an expert in fetal MRI.