



Response: “Another merit of fetal MRI in prenatal diagnosis of right aortic arch”

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Matsubara et al. described the possibility to detect the presence or absence of tracheal stenosis in fetal MRI [1]. Prenatal diagnosis of airway obstruction is important in terms of postnatal management and outcome. Unfortunately, we were not able to confirm the presence of this signs in the two cases, who presented airway obstruction postnatally, in our recent study. However, fetal MRI is becoming increasingly important in diagnosing fetal abnormalities and the ability to observe tracheal stenosis shows the high sensitivity to detect pathological features.

As mentioned before, foetal MRI becomes more common as part of prenatal diagnosis, if available. Indeed, it is very useful to see additional fetal features, which may not be clear in the ultrasound examination, especially when fetal echocardiography is limited [2]. It shows high sensitivity (95.6%) in the diagnosis of aortic arch abnormalities and it is claimed to be the best modality for demonstrating the arch vessels [3, 4]. Regarding the diagnosis of possible airway obstruction in cases of right aortic arch, as described by Matsubara et al. [1], it is a very interesting new finding, which should be paid more attention too, when performing foetal MRI with suspicion of vascular ring malformations. As a consequence, it may be used as a prognostic sign, whether tracheal obstruction will be symptomatic after birth and need further treatment or even intervention in new-borns. Thus, the presence or absence of this specific morphological features may help to improve parental counselling and postnatal management.

Nevertheless, although MRI is a promising tool in cardiac abnormalities and aortic arch malformations, the importance

of ultrasound and foetal echocardiography should not be denied. Furthermore, recommendation for karyotyping should be offered in any case of (right) aortic arch abnormalities, irrespective of co-existing malformations and availability of foetal MRI.

Compliance with ethical standards

Conflict of interest The author declares that there is no conflict of interest and received no funding regarding this study.

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