



PICTORIAL ESSAY

Furcate and Velamentous Cord Insertion: Prenatal Ultrasound

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Furcate insertion indicates the separation or forking of cord vessels before reaching the substance of placenta, and loss of the Wharton's jelly. Furcate–velamentous cord insertion is rare and may predict potential complications like foetal

growth restriction, preterm labour, antepartum haemorrhage, intrapartum rupture and haemorrhage, abnormal CTG patterns, abnormal Apgar scores and intrauterine foetal death (Figs. 1, 2).

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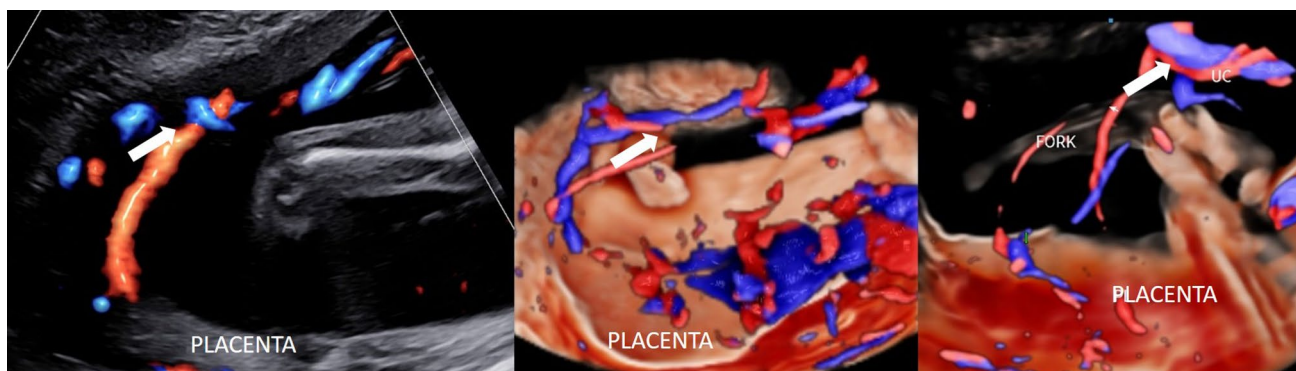


Figure 1 (Left to right) Grayscale-colour Doppler and 4D-STIC CrystalVue Flow images of the prenatal ultrasound at 23 weeks show three-vessel umbilical cord inserting into the membranes over the anterior uterine wall (velamentous cord insertion) and at this point

there is forking of the umbilical vessels (arrow), known as furcate insertion (one artery and vein in one limb of the fork and another artery in another limb of the fork) before it finally reaches into the substance of placenta (lying posteriorly)



Fig. 2 The same is confirmed in the post-partum specimen. Note that the forked vessels are bare, devoid of Wharton's jelly as they course through the membranes (line arrows indicate the course of vessels through the membranes indicating velamentous insertion; open arrows indicate forking)

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Declarations

Conflict of interest No conflict of interests.

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About the Author



Nupur Shah Dr Nupur Shah is a consultant fetal medicine and prenatal genetics, practicing in Baroda, Gujarat. After her post-graduation in OB-GY, she completed her fetal medicine foundation accredited fellowship from Apollo center of fetal medicine, under Dr Anita Kaul. She trained from King's College, London from Prof Kypros Nicolaides and Dr Vita Zidere (fetal echocardiography). She is Fetal Medicine foundation, UK certified for NT scan, anomaly scan, Dopplers, Cervical length, Pre-eclampsia

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