LETTER TO EDITOR (VIEWERS CHOICE)

UMBILICAL VEIN VARIX IN NEWBORN- A CAUSE OF CONCERN

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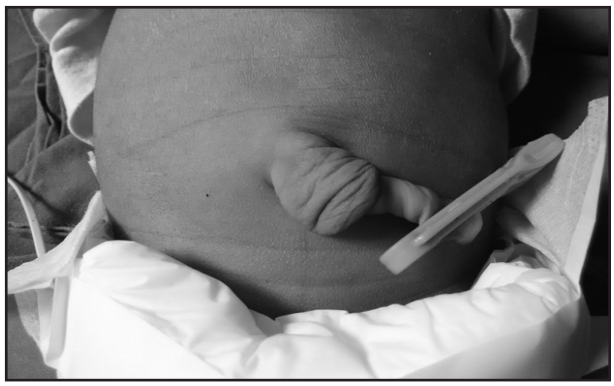
A term male baby was born at 37 weeks gestation to third gravida mother. She had conceived after a period of infertility and had undergone hysteroscopic septal resection for subseptate uterus post two missed abortions. Antenatal ultrasound at 34 weeks reported that the fetus had dilated umbilical vein in its extra and intrahepatic portion, with diameter 11 mm with prominent fetal inferior vena cava and hepatic veins suggestive of umbilical vein varix. Doppler flow was normal. Antenatal fetal echocardiography was normal. At 36 weeks, repeat scan revealed the diameter of varix had increased to 12.5 mm. No malformation was seen. In view of mother's obstetric history, elective caesarian section was done. Baby cried immediately after birth and had birth weight of 2.795kg. On examination, baby was stable, with no dysmorphic features. Peripheral pulses and blood pressure were also normal, and oxygen saturation was >97% in room air. Systemic examination was normal. However, loops of skin folds were present around the umbilical cord, as shown in Fig 1. Baby was given breastfeeds, developed jaundice on second day of life for which phototherapy was started. Hemogram revealed raised hematocrit (65.1%) on third day requiring partial exchange. Sepsis screen was negative. Echocardiography suggested tiny PDA and patent foramen ovale with left to right shunt. Ultrasound doppler of spleno portal axis revealed mild prominent left portal vein 5.8 mm diameter, with pulsatile flow in left and main portal vein, consistent with normal variation. Hepatic veins and inferior vena cava were normal. Baby improved and was discharged on fifth day. Baby was stable and thriving well during follow up.

Fig.1 Skin loops around umbilicus in the baby



Umbilical vein varix (UVV) is a focal aneurysmal dilatation of the umbilical vein, diagnosed when the diameter of the intra-abdominal part of the umbilical vein exceeds 9 mm. Around 100 cases have been reported. (1) It is rare and represents 4% of the umbilical cord malformations. Overall 34.8% of the infants have major congenital anomalies. (2) Increased risk of fetal malformations like chromosomal abnormality, multiple malformation syndromes, cardiac defects and diaphragmatic hernia have been associated with it. (1,2) Other complications associated are hydrops fetalis, cryptorchidism, atrial septal defect, pulmonary seques¬tration, renal pelvis dilatation, incomplete unilateral duplex kidney, cerebral ventriculomegaly, skeletal dysplasia and a single umbilical artery. (3) Even if no major malformation is seen on ultrasound, it should be investigated in detail. (2) Fetal echocardiography to exclude any cardiac anomaly and genetic consultation should be advised. Amniocentesis should be offered when other anomalies are found. (4) Follow up by color doppler ultrasound should be done every 2 weeks. If intrauterine growth restriction or turbulence in the varix is observed, fetal monitoring after 32 weeks' gestation is recommended. Hydrops, clot in varix, or fetal distress demand prompt delivery. (4) Postnatally, baby should be examined thoroughly for suspected systemic anomalies as mentioned. Echocardiography, color doppler ultrasound should be done with close follow up. In view of associated high risk, even newborn with UVV who are normal at birth, as in our case require workup and close monitoring.

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