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Case of Placental Mesenchymal Dysplasia - a rare lesion

Clinical history:
26 year old woman with full term pregnancy, delivered a dead fetus with a clinical diagnosis of partial hydatidiform mole, checked with sonography earlier. The placenta was sent to the lab (dead fetus was not sent).

Gross description:
Placenta was enlarged measuring 24 x 20 cm, and part of the placenta had grape-like vesicles of 0.5 to 1.5 cm in size with clear fluid. There was a dark brown hemorrhagic area of 5.0 x 4.5 cm. The umbilical cord measured 20 x 1.3 cm.

Micro description:
Showed areas of mature chorionic villi and adjacent, large, varying sized chorionic villi with central oedema surrounding the myxoid area, and some with large blood vessels which had thick muscular wall. Some villi had fibroblastic proliferation. There were areas of markedly increased vascularity of chorongiosis appearance and hemorrhage. Villi had no trophoblastic proliferation around or polar areas, and there are no trophoblastic inclusion and thus excludes partial hydatidiform mole (umbilical cord and membranes were within normal limits).

These features favored the diagnosis of **placental mesenchymal dysplasia**.

Relevant pictures are sent (see **topic**).

Discussion:
PMD is a rare entity clinically and sonographically mistaken for partial hydatidiform mole. It was first described by Mascosa and his colleagues in 1991. It is associated with high rates of intrauterine death, growth retardation and association with Beckwith-Wiedemann syndrome (a condition with macrostomia, visceromegaly, macroglossia and adrenal cyst).

Unlike complete mole or partial mole, the pregnancy extends into third trimester and very few cases of live fetus delivery have been recorded.

Exact etiology is not known but suggested theories are congenital malformation of mesoderm, hypoperfusion and androgenital mosaicism. Abnormal karyotyping associated are trisomy 13, KF SYNDROME, or triploidy.

Note: acknowledgement - the slides were seen by two other pathologists and confirmed the above diagnosis.

References: Pathol Res Pract 1991;187:324, Am J Clin Pathol 2006;126:67, Indian J Pathol Microbiol 2013;56:57, Arch Pathol Lab Med 2007;131:131