

## Placental anastomoses in a spontaneous monochorionic-triamniotic triplet pregnancy



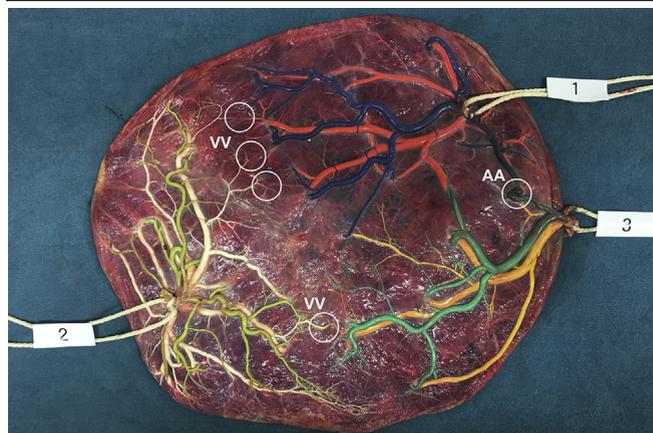
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**FIGURE 1**  
Monochorionic triplet placenta injection study



Wohlmuth. Placental anastomosis in triplet pregnancy. *Am J Obstet Gynecol* 2019.

**FIGURE 2**  
Arterioarterial and venovenous anastomoses



Wohlmuth. Placental anastomosis in triplet pregnancy. *Am J Obstet Gynecol* 2019.

A 31-year-old woman (gravida 1, para 0) spontaneously conceived triplets without fertility treatment. Prenatal ultrasound evaluation and postnatal placental studies confirmed a monochorionic-triamniotic triplet pregnancy, which is exceedingly rare, occurring in approximately 1:100,000 pregnancies. These pregnancies are at significant risk for the development of selective intrauterine growth restriction, twin-twin transfusion syndrome, and twin-anemia-polycythemia sequence. The pregnancy was followed closely for evolving complications; however, growth, amniotic fluid levels, and fetal Doppler parameters remained stable throughout gestation. At 30 weeks gestation, 3 healthy male

newborn infants were delivered via cesarean section because of intractable uterine contractions. Placental injection studies (Figures 1 and 2) revealed equal placental sharing with each placental vascular bed taking up approximately one-third of the total placental mass.

Arterioarterial and/or venovenous anastomoses were found on each of the 3 vascular equators that allowed pressure equalization of unidirectional flow through arteriovenous connections. This likely explains the uneventful course without twin-twin transfusion syndrome, selective intrauterine growth restriction, or twin-anemia-polycythemia sequence. ■

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Received Dec. 20, 2018; revised Jan. 7, 2019; accepted Jan. 9, 2019.

The authors report no conflict of interest.

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0002-9378/\$36.00

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<https://doi.org/10.1016/j.ajog.2019.01.207>