Virtual Angiography of the Fetal Brain Using Post-Mortem MRI.

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Introduction
Recently, Postmortem MRI imaging is used to replace traditional invasive autopsy examination. This may be an alternative in the 40% of cases which cannot be autopsied because of parental demand to protect the integrity of their fetus, or when standard autopsy is not available. Cerebral sinovenous thrombosis (CSVT) is a rare and significant condition in fetuses and is mostly diagnosed late during the second or third trimester.

Case Report
We describes a unique case which presented prenatally at 33 weeks using ultrasonography and MRI with severe ventriculomegalgy and suspected thrombosis of the straight sinus. Parents were counseled by a multidisciplinary team and elected to terminate the pregnancy following approval of the ethics committee. Post mortem conventional T1 and T2 sequences, at the location of the straight sinus a collection was seen, compatible with thrombosed sinus. Post mortem 3D-MRA with contrast material succeeded to depict the arterial tree of the brain and upper body.

Conclusion
This new application of virtual angiography using post-mortem MRI highlights the possibility to evaluate vascular anomalies, which can be difficult to demonstrate prenatally or through conventional autopsy.