

Furcate cord insertion of the umbilical cord: pathological and clinical characteristics in 132 cases

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Objective

To evaluate clinical and pathological characteristics of the furcate cord insertion of the umbilical cord in 132 cases.

Methods

A retrospective study of cases with a furcate cord insertion of the umbilical cord, found in the pathological database of the Charité between 1993 and 2016, was performed and 132 cases were identified. An analysis of the pathological features and the perinatal outcome was done after the extraction of the data from the pathological database and the electronic medical records.

Results

The prevalence for the furcate cord insertion in our patient collective lies at 0. 17% with a risk for intrauterine fetal death of 1. 01%. The furcate cord insertion is not associated with an intrauterine growth restriction but with a higher rate of HELLP syndrome, retention of placenta and lower five-minute Apgar scores. Risk factors for an adverse outcome after analyzing our data are an above average long furcate cord insertion and additional abnormal findings of the umbilical cord such as thrombosis or ectasia of the umbilical vessels. To avoid prematurity but to also reduce the risk for the fetus, delivery after 37 weeks of gestation is recommended. In case of additional sonographic abnormalities of the umbilical cord, the patient should be counselled on even earlier delivery.

Conclusion

The furcate cord insertion is a very rare anomaly of the umbilical cord, occurring in 0. 17% of pregnancies. In most cases the outcome is good but in approximately 1% of cases an intrauterine fetal death is observed.