

Two cases of successful percutaneous coarctation of aorta repair in pregnant women.

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Introduction. The native severe coarctation is a condition in which pregnancy risk – WHO IV, what means – pregnancy contraindicated. The secondary hypertension during pregnancy is present in 5 to 10% of cases and must be considered in presence of drug resistance. Also, the hypertension is a frequent medical complication during pregnancy (normal pregnancy – preeclampsia 11% in population). Management of hypertension during pregnancy is challenging due to the fetal toxic impact of some drugs, namely ACE inhibitors and ABRs. Treatment of the arterial hypertension is mandatory when the blood pressure is higher than 170/90 mmHg. Although, we should bear in mind, that the aggressive treatment of arterial hypertension must be avoided in the patient with coarctation of aorta to prevent the placental hypoperfusion. To our best knowledge no one case of aortic coarctation repair during pregnancy has been described till nowadays. We are presenting two cases of successful stenting of the aorta during pregnancy, because of the uncontrollable hypertension.

Case 1. A 17-years old woman admitted in her 24-th week of gestation with uncontrollable hypertension. Mid-aortic syndrome was diagnosed for the first time. Severe abdominal coarctation was repaired with CP covered stent. After the procedure the blood pressure decreased from 220/100 mmHg to 140/90 mmHg. The transcatheter gradient decreased from 110 mmHg to 30 mmHg. The spontaneous vaginal delivery occurred in 39 weeks of pregnancy, the healthy male newborn was born.

Case 2. A 28 years old women who had coarctation of aorta repaired in a childhood admitted in her 19-th week of pregnancy with arterial hypertension resistant to medication. Echo data showed hypoplastic transverse arch with the gradient across it 70 mmHg. She had transverse arch stenting with Andrastent. The residual invasive gradient was 20 mmHg. The patient did not require any medication during all pregnancy and had uneventful spontaneous vaginal delivery.

Conclusion. Percutaneous intervention for undiagnosed coarctation or re-CoA is possible during pregnancy and should only be performed if severe hypertension persists despite maximal medical therapy and there is the evidence of maternal or fetal compromise

Key words: coarctation of aorta, pregnancy, arterial hypertension.