In this report we present three cases of high output cardiac failure. The first and second fetuses referred to the management of fetal anemia by intrauterine transfusion in the third trimester and the third case had a large sacrococcygeal teratoma at 17 weeks.

The fetal weight in first case was less than 10 percentile, in second case it was in normal limit and in the third one it was above 90 percentile. Left ventricle, right ventricle and combined cardiac output (CCO) and weight-indexed CCO were assessed for both fetuses and all were above normal limit indicated high output cardiac failure. Right to left cardiac output ratio was also increased obviously (in first fetus: 3.3; in second one: 2.3 and third one: 2.8). The CCO of first case was about 1700 ml/min (about 2.8 times above the value of 50 percentile for gestational age based on existing nomograms) and 1280 ml/kg/min (about 3.2 times higher). For the third case the CCO was 166 ml/min (about 2.7 times higher) and 714 ml/kg/min (about 2.3 times higher). But in the second fetus with normal weight both CCO and weight-indexed CCO was about 1.4 times higher than normal value.

Our results point out that the fetal growth restriction overestimates the weight-indexed CCO and the weight above 90 percentile underestimates it. In these conditions CCO seems more accurate in demonstrating the true burden on fetal heart in comparison with weight-indexed CCO.