Introduction

We wanted to share two cases which heart anomaly was found by a single great artery in left ventricular outflow tract at beginning. One was terminated at 21 weeks 6 days gestational age with final diagnosis of persistent truncus arteriosus (PTA). The other was delivered by Cesarean section at 38 weeks gestational age with final diagnosis of pulmonary atresia with ventricular septal defect (PA-VSD) and tricuspid atresia.

The heart anomaly of both cases was revealed by a single great artery in left ventricular outflow tract. According to heart embryology, PTA is thought to result from incomplete or failed septation of the embryonic truncus arteriosus. PA is happened when pulmonary valve did not form at all, and no blood can go from the right ventricle of the heart out to the lungs. Both PTA and PA-VSD are characterized by a single great vessel emanating from the heart. The embryonic truncus arteriosus and the relatively larger diameter of aorta in PA-VSD present a single great artery in left ventricular outflow tract.

Conclusion

We proposed the term “Chinese vase sign” for identifying a single great artery in left ventricular outflow tract, which suggested the abnormality of artery trunks despite deceivingly normal four chamber views. Further differential diagnostic procedure between persistent truncus arteriosus and pulmonary atresia with ventricular septal defect was needed after detecting a single great artery in left ventricular outflow tract because both PTA and PA-VSD may result in cyanotic baby which need surgical intervention after birth.