Double outlet right ventricle: a case report

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Introduction: Double outlet right ventricle (DORV) is congenital cardiac malformation which occurs 1-3% of individuals with congenital heart defects[1]. The echocardiography is a method of choice to detect the regional acceleration of flow and in most cases is sufficient for diagnosis and surgical planning[1]. When the findings at the imaging examination are inconclusive, cardiovascular MR imaging may play an important role in anatomy of the ventricular septal defect, functional status of both ventricles, and to identify any residual stenosis or regurgitation or coexistent anomalies[2]. In DORV both great arteries come from the same pumping chamber[2]. These patients require long-term follow up and may present for surgical or catheter-based interventions[3]. Possible complications may include heart failure, high blood pressure in the lungs or death[3].

Case report: We report 43-year-old men with Blalock-Taussig shunt. He visited hospital for cardiac evaluation after he had respiratory infection with shortness of breath and palpitation. Electrocardiography showed right axis deviation and right ventricular hypertrophy. Laboratory examination revealed polycythemia and hypoxemia. This patient has associated ventricular and atrial septal defect and hypoplastic pulmonary artery. The heart showed dilatation of the bilateral ventricles, right ventricular hypertrophy with reduced systolic function (39%). Above the right ventricle is left atrium with pulmonic veins.

Conclusion: MR imaging provides accurate additional anatomic information in patients with DORV, which is helpful in presurgical planning as well as during follow up.

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LITERATURE

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