Introduction: There are several rhythm and conduction disturbances associated with congenitally corrected transposition of the great arteries (ccTGA). The purpose of this study is to determine the incidence of rhythm and conduction disturbances in ccTGA patients with two adequate-sized ventricles.

Methods: Retrospective analysis of records of 49 patients from single center were reviewed to determine long term results of ccTGA patients.

Results: The study comprised 49 patients (15 girls, 34 boys). The median age of the patients at initial presentation was 3 months (1 day-34 years) and mean period of follow-up was 4.5 ±1.8 years (1 month-22 years). Forty seven of them had associated heart anomalies. The most common associated lesion was VSD (38 patients). Pulmonary valve abnormalities were second most common lesion. Pulmonary stenosis was more common than pulmonary atresia (17 versus 6 patients). As usual Ebstein anomaly and tricuspid regurgitation were quite common among our patients. During the follow-up period 18 patients had a total of 22 operations. Systemic to pulmonary circulation shunts were the most common procedures (9 patients). Conventional biventricular repair was and double switch procedure were performed equally (5/5 patients). Tricuspid valve replacement was performed in 2 patients. At initial examination, two patients had first-degree AV block, one second-degree AV block and one congenitally complete AV block. Additionally, one patient had atrial ectopic rhythm, one left bundle branch block. Supraventricular tachycardia was detected in 3 patients. At follow-up, complete AV block developed in 5 patients after intracardiac surgery. Pacemaker implantation was required for these patients and one patient with congenitally complete AV block.

Conclusions: Patients diagnosed as ccTGA should be followed lifelong. During the disease course they may need different type of surgical procedures and ccTGA may complicate with different types of rhythm and conduction disturbances at any time.