INTRODUCTION: coronary arteries abnormalities is frequently associated with severe aortic stenosis. It has been hypothesised that the same ischaemic noxa that resulted in aortic valve stenosis may be the cause of coronary pathology. Surgical complications related to coronary artery abnormality result in 2% morbidity in the immediate postoperative period.

CASE REPORT: We present a clinical case of an 11 years old patient with severe aortic valve stenosis who underwent 3 percutaneous aortic valve valvuloplasty interventions. He was admitted for Ross-Konno surgical intervention. Postoperative transesophageal echocardiography evidenced akinetic and dilated right ventricle, with a new residual severe tricuspid regurgitation. During Surgical inspection of the coronary arteries, the right coronary ostium was found to be small. The patient was admitted to PICU and due to low cardiac output syndrome, the patient was placed on ECMO. After 7 days the RV function was still low. The ECMO was changed for a right ventricle assistance. he was elected to undergo a right coronary bypass with the internal mammary artery, however it was not possible to perform due to epicardial fibrosis. 16 days later the RV function was only discreetly better so a new catheterism was done to treat the stenosis with angioplasty. 6 days after that the assistance was suspended and now the patient is discharged, at home, treated with oral diuretics and with ambulatory follow up.

CONCLUSIONS:
Surgeries that involve the aortic valve can modify the coronary artery anatomy and therefore its perfusion, even when the coronaries remain untouched. Therefore, it is necessary to describe very well its anatomy not just before surgery, but also after it. Particularly if in the postoperative period the patient does not evolve as expected and other medical and surgical reasons are discarded. An early catheterization and a more aggressive approach may help to reduce morbility in these patients. Reports of individual cases may help in this condition.