# Complete common atrioventricular canal with unusual longevity. A case report

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### **Abstract**

We report a rare case of a complete common AV canal with unusual long survival in a 68 year-old-woman referred to our hospital with dyspnea and palpitation and with signs of moderate heart failure.

## INTRODUCTION

The terms "endocardial cushion defect ", "atrioventricular septal defect ", "common AV septal defect " are interchangeable in describing defects in the formation of the AV valves, the anterior portion of the atrial septum and the posterior portion of the ventricular septum. Depending on the size of the ventricular septal communication and the competence of the AV valve or AV valves, patients with AV canal defects may become symptomatic early in life or may remain relatively asymptomatic until young adulthood. Much has been accomplished in the treatment of patients with atrioventricular septal defect, reflecting our increased knowledge of anatomy, clinical predisposition to early pulmonary vascular damage, the character of the specialized conduction tissue and appreciation of those particular anatomic risk factors in patients with these heterogeneous malformations. How we have improved on the natural history of this disorder considering that only 54% of patients with the complete form of atrioventricular septal defect were predicted to survive to 6 months of age and 15% were predicted to survive to 2 years without medical and surgical intervention.

We report a case of complete common atrioventricular canal with unusual longevity.

## **CASE REPORT**

A 68-year-old-woman presented with signs of moderate congestive heart failure. Since childhood, she suffered from dyspnea and cyanosis. The physical examination showed a splitting of a second cardiac sound and a 3/6 L systolic murmur. The electrocardiogram demonstrated a first degree atrioventricular block with complete right bundle branch

block and left anterior hemiblock. The thoracic roentgenograms (Fig 1) revealed an enlarged main pulmonary arterial segment and an increased vasculature. Transthoracic echocardiography (Fig 2 and Fig 3) showed a common atrioventricular canal of a complete type. This condition is commonly associated with death in infancy and in only exceptional cases the patient survives to the adult life. To the best of our knowledge, this is the first reported case in a patient older than 50 years of age.

Figure 1
Fig 1: thoracic roentgenograms



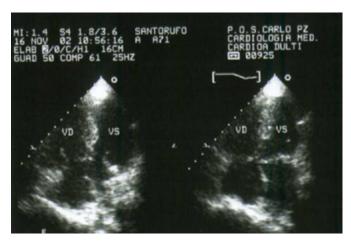
# Figure 2

Fig 2: Transthoracic echocardiography



# Figure 3

Fig 3: Transthoracic echocardiography



## References

- 1. Tardon R, Moller j, Edwards J. Unusual longevity in persistent common atrioventricular canal. Circulation 1974; 50: 619
- 2. Berger TJ, Blackstone EH, Kirlin JW, Bargeron LM, Hazerling JB, Turner ME. Survival and probability of cure without and with operation in complete atrioventricular canal. Ann Thorac Surg 1979; 27: 104-11
  3. Kumar SR, Javid M, Misra KP, Kumar MV. Complete
- 3. Kumar SR, Javid M, Misra KP, Kumar MV. Complete common AV canal with long survival. Indian Heart Journal 1997: 49(4): 421-422.

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