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# Right Atrial Mass in a Patient with Polycystic Kidney Disease: An Uncommon Association

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### Introduction

Right atrial masses are often quite baffling in asymptomatic patients, and require extensive evaluation. We report the case of a man with polycystic kidney disease with incidentally detected right atrial mass with turned out to be Chiari network.

### **Case History**

A 60-year old man, with polycystic kidney disease, was incidentally detected to have a right atrial mass on routine echocardiogram. He was otherwise asymptomatic with normal clinical examination.

Detailed transthoracic echocardiogram revealed situs solitus with levocardia, with good biventricular systolic function and grade I diastolic dysfunction. Inferior vena cava was not dilated.

A mesh-like structure was seen in the right atrium, spanning from the opening of the inferior vena cava, with unrestricted movement. There was no demonstrable gradient across the structure, as well as the tricuspid valve was unaffected.

A diagnosis of Chiari network was made, and he was kept on medical follow-up.

#### Discussion

The Chiari network, first described in 1897 by Hans Chiari, is a fenestrated, net-like embryonic remnants of valves of sinus venosus, lying in close proximity to the inferior vena cava and coronary sinus [1]. It results from failure of resorption of the right sided sinus venosus valve, and prevalence is reported to be 2-13.6% [2].

Although it is mostly an incidental finding, it can pose diagnostic difficulties during echocardiography, mimicking thrombus, tumour and vegetation [3,4]. Rarely reported complications include thromboembolism, catheter entrapment and tricuspid regurgitation [5,6,7].

Previously, the presence of Chiari network has not been described in patients with polycystic kidney disease. We highlight this case to report this uncommon association.



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**Figure 1:** Sub costal view showing strand like structure in the right atrium.



**Figure 2:** Apical 4-chamber view showing strand like mass in the right atrium.

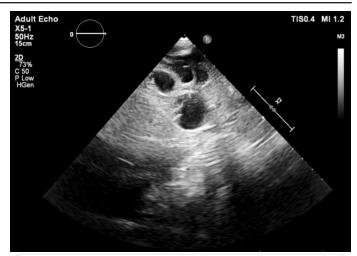


Figure 3: Renal ultrasound showing polycystic kidney.

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