Introduction: Atypical atrial flutter is a complication of post surgically corrected atrial septal defect (ASD). The 2015 ACC/AHA/HRS/SVT Guideline gave catheter ablation a Class IIa Level C recommendation as primary therapy for this arrhythmia. There were no prospective randomized controlled trials comparing the efficacy or safety between anti-arrhythmic drugs and catheter ablation.

Methods: Objective: To present a case of a successful radio frequency ablation of an atypical atrial flutter around an ASD patch in a patient who had late correction of sinus venous atrial septal defect with right ventricular dysfunction and pulmonary hypertension.

Result: Case Presentation: A 58-year old woman with sinus venosus ASD and partial anomalous pulmonary venous return who underwent surgical correction at the age of 44. She developed failure symptoms and had episode of atrial flutter that warranted cardioversion. She was admitted due to worsening failure symptoms with concomitant pneumonia. During hospital stay, she had recurrence of atrial flutter with low blood pressure. There was improvement of symptoms and hemodynamics on conversion to sinus rhythm with electrocardioversion. She subsequently underwent electroanatomical mapping and radiofrequency catheter ablation.

Conclusion: Arrhythmias that develop later after surgical correction of congenital heart disease which in this case is an atypical atrial flutter in a post ASD repair patient, can still be treated successfully. This presents catheter ablation as a primary therapy in maintaining and restoring sinus rhythm and can significantly decreased the need for long-term anti-arrhythmic drug treatment that have potentially side effects. It is important that in every procedure, a physician should carefully weigh potential risks and benefits of treatment options.