Watchman Commentary Letter

* Watchman device not done in patients with ESRD
  + Find sources why that is not done
  + No large studies (case vs. control)
  + Basically the commentary is about why we need more studies looking at this specific phenomenon
* Watchman device + renal transplant
  + Better outcomes

Patients with ESRD are at higher risk for developing AFib. (stuff about AFib and ESRD) Patients with ESRD are often harder to treat for AFib due to renal dysfunction. Patients with ESRD and transplants often have many comorbidities.

The Watchman device is an implantable device that occludes the left atrial appendage to prevent blood pooling. It is a good alternative for patients who cannot be managed on anticoagulation alone. Long-term use of anticoagulation is risky, which .

Patients with ESRD often need renal transplants. There have not been many large studies on surgical outcomes of patients with ESRD or renal transplants and the Watchman device. Those receiving transplants are often excluded from clinical trials. Transplanted patients often have renal dysfunction and other comorbidities regardless of which organ was transplanted.

There are very few studies about patients with both the Watchman device and organ transplants, and even fewer on those with renal transplants specifically. There were not any transplant patients included in the trials that evaluated the safety and efficacy of the procedure (renal and liver transplant paper).

A case study of 6 patients who received solid organ transplants and Watchman devices was performed. 1 patient died a year after receiving the Watchman device due to pulmonary hypertension, but the other 5 were able to remain off anticoagulants for 3-5 years after receiving the Watchman.

Study of renal and liver transplant patients: 400ish patients with no significant differences in outcomes between transplant patients and non-transplant patients, first known study doing this. Hematomas and hemorrhagic strokes were found to be more common in transplant patients, but in-hospital mortality, cardiovascular, neurological, renal, bleeding complications were similar in patients with transplants and without transplants.

While a study found that the Watchman procedure was associated with higher in-hospital mortality (and other complications), the study was limited by the length of follow up. They did not have long-term follow up data, so long-term complications were not reported. (Munir 2021 paper)

We utilized TriNetX to identify patients with both ESRD and AFib. We initially found 190,682 patients with ESRD and AFib. Of those, 4,350 have received a renal transplant. 114 patients with renal transplants have received a Watchman device. Of 116 renal transplant patients, 26 patients received a Watchman device before transplantation, and 92 received a Watchman device after transplantation.

ESRD patients who received the Watchman device did not experience any increased risk in adverse outcomes than patients without ESRD.

The number of ESRD and renal transplant patients receiving the Watchman device has not changed significantly since the Watchman procedure was FDA approved. The Watchman device was not shown to have more risk than anticoagulation in patients with ESRD in our initial study.