

# UCLA

## UCLA Previously Published Works

### Title

PERCUTANEOUS PATENT FORAMEN OVALE OR ATRIAL SEPTAL DEFECT CLOSURE IN IMMUNOCOMPROMISED PATIENTS

### Permalink

<https://escholarship.org/uc/item/8g359820>

### Journal

Journal of the American College of Cardiology, 65(10)

### ISSN

0735-1097

### Authors

Kar, Subrata  
Aboulhosn, Jamil  
Tandar, Anwar  
et al.

### Publication Date

2015-03-01

### DOI

10.1016/s0735-1097(15)60527-7

### Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed



## Congenital Heart Disease

### PERCUTANEOUS PATENT FORAMEN OVALE OR ATRIAL SEPTAL DEFECT CLOSURE IN IMMUNOCOMPROMISED PATIENTS

Poster Contributions

Poster Hall B1

Saturday, March 14, 2015, 3:45 p.m.-4:30 p.m.

---

Session Title: Novel Treatment Strategies for High Risk Congenital Heart Patients

Abstract Category: 12. Congenital Heart Disease: Therapy

Presentation Number: 1151-323

---

Authors: *Subrata Kar, Jamil Aboulhosn, Anwar Tandar, Rubine Gevorgyan, Nicholas Miller, Jonathan Tobis, UCLA Medical Center, Division of Interventional Cardiology, Los Angeles, CA, USA*

**Background:** The safety of Patent foramen ovale (PFO) or atrial septal defect (ASD) percutaneous closure in immunosuppressed patients or with autoimmune disease is unknown. We attempted to determine if closure is safe in such patients.

**Methods:** A prospective observational multicenter study was performed in 24 patients who were immunocompromised or had autoimmune disease from vasculitis, Human Immunodeficiency Virus (HIV), hepatitis, cancer, or renal transplant and underwent percutaneous PFO or ASD closure for cryptogenic stroke (9, 38%), desaturation (5, 21%), migraine (7, 29%), or a combination of these diagnoses (3, 13%). Post procedure follow-up included clinic evaluation in 3-6 months or telephone questionnaire up to 8 years (21 ± 28 months).

**Results:** Of the 24 patients (53 ± 14 years), 19 had a PFO (79%), 5 had an ASD (21%), and 21 underwent closure (88%). No patient reported endocarditis, device erosion, exacerbation of migraine, or recurrent stroke. Only 1 patient in the PFO group (4%) experienced a transient neurologic deficit after closure. Of the 7 who had migraine prior to closure, 4 (57%) reported resolution of migraines. For patients who were unreachable for phone interview, mortality status was verified by the social security death index and revealed 5 deaths which were related to non-cardiac conditions in 3 cases (1 of these patients did not receive a device), 1 from metastatic pancreatic cancer, and 1 was unknown in a 77 year old woman who did not receive a device.

**Conclusion:** Percutaneous PFO or ASD closure can be safely performed in patients who are immunocompromised or have autoimmune disease and suffer from clinical conditions associated with a septal defect.