

## Letter to the Editor

## Atrial Fibrillation Following Transcatheter Closure of Patent *Foramen Ovale*

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**P**aradoxical embolism due to the presence of patent *foramen ovale* (PFO) is an accepted mechanism of ischaemic cryptogenic stroke.<sup>1</sup> Transcatheter closure of the patent *foramen* is the logical, safe and accepted technique for the prevention of further neurological episodes in individuals who have had transient ischaemic events or stroke. Complications are infrequent and arrhythmias are occasionally mentioned in large series. We report four individuals (out of a total of 96 atrial septal defect/PFO closures) who developed transient atrial fibrillation (AF) 4-14 days after device closure.

All four had initially presented with neurological events, were documented as having PFOs on echocardiography with shunt reversal, had uneventful PFO device closures, and continued on 6 months of daily, low dose aspirin. Patient characteristics are given in Table 1. Presentation in AF was with varying combinations of palpitations, fatigue, shortness of breath, dizziness and headaches. AF was easily controlled with cardioversion (two required cardioversion twice), and patients were loaded with amiodarone, which was continued orally for 3 months.

Our incidence of AF (4.2%, 95% confidence interval [CI] 1.3-10.9) is similar to those reported by Khositseth et al (1.9%, 95% CI 0.3-7.5%) and Anzola et al (7.9%, 95% CI 4.2-14).<sup>2,3</sup> It is interesting to note that our four cases of AF only occurred in patients after PFO closure and none occurred after closure of an atrial septal defect. Drastic measures for treatment of this complication, such as pulmonary venous radiofrequency ablation, are unlikely to be required.<sup>4</sup>

## References

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**Table 1.** Patients presenting with atrial fibrillation after closure of patent foramen ovale (PFO, 4/96).

Sex	Age (yrs)	Comorbidities	Pathology	Device
F	51	Hypercholesterolaemia, hypertension	Flail septum	16 mm Amplatzer ASO
M	42	–	Flail septum	20 mm Helex
F	48	Hypercholesterolaemia, obese, smoker	PFO only	10 mm Amplatzer ASO
M	39	–	Flail septum	12 mm Amplatzer ASO