Abstract:

Sir

Patent foramen ovale (PFO) occurs in 25-30% of the general population. Stroke in the puerperium is a rare phenomenon, 34 per 100,000 women. A 32 year old lady, Para3+2 presented eight days postnatally with symptoms of a transient episode of left sided facial and limb paresthesia and dysphasia. She had a CT brain which was normal, however a subsequent MRI brain showed a small right parietal lobe infarct. An echocardiogram was performed which showed a small PFO, with an ejection fraction of 60-65%. A bubble study was performed which was positive with valsalva. She was started on aspirin 300mg once daily for 2 weeks, and shall remain on life-long aspirin 75mg.

Introduction

Patent foramen ovale (PFO) occurs in 25-30% of the general population. Paradoxical embolism may be more frequent in pregnancy due to the hypercoagulable state. Cases of stroke and myocardial infarction in conjunction with a patent foramen ovale in pregnancy and the puerperium have been reported.

Case Report

A 32 year old lady, Para3+2 presented eight days postnatally with symptoms of a transient episode of left sided facial and limb paresthesia. Her antenatal course was complicated by a new diagnosis of hepatitis C at her booking visit. She was induced at 39 weeks gestation due to oligohydramnios and had a vaginal delivery. She had a CT brain which was normal, however a subsequent MRI brain showed a small right parietal lobe infarct. Carotid Doppler and lower limb Doppler studies were normal. An echocardiogram was performed which showed a small PFO, with an ejection fraction of 60-65%. A bubble study was performed which was positive with valsalva. She was started on aspirin 300mg once daily for 2 weeks, and shall remain on life-long aspirin 75mg. She has been seen at 2 and 6 weeks postnatally and is asymptomatic.

Discussion

This case represents transient symptoms of a parietal infarct in the postpartum period. Detection of PFO can be augmented by releasing a sustained Valsalva manoeuver while performing a Bubble study. The Valsalva manoeuvre occurs during the second stage of labour causing the same right-to-left shunt to occur, allowing a paradoxical embolus to travel to the brain. A study by Komar et al, comparing symptomatic to asymptomatic patients with PFOS, showed that those who are symptomatic have larger diameter PFO (3.9mm +/- 1.4mm), longer tunnel length (overlap of septum primum and secundum) and a greater frequency of atrial septal aneurysm (55% vs 15%). The 2012 ACCP guidelines advise antplatelet therapy in patients with cryptogenic stroke and PFO. Anticoagulation is indicated only in those with other risk factors such as a hypercoagulable state, or in the case of recurrent ischaemic events despite treatment with aspirin. Fortunately for this lady she suffered no residual neurological deficit and her prognosis is excellent.

References

A Rare Case of Cryptogenic Stroke with an Incidental Finding of Patent Foramen Ovale