peripartum cardiomyopathy is controversial and still not fully understood (2). The most important assumption focuses on the increased fluid load in pregnancy. Increased blood volume and cardiac output and decreased systemic vascular resistance may result in a reduction of LVEF, in response to this augmented load (3). However, several hypotheses have also been postulated such as myocarditis, viral infection, inflammatory cytokines, selenium deficiency and abnormal autoimmune activity of maternal antibodies. These autoantibodies may cross react with the myocardium and can cause cardiomyopathy (4, 5).

Triplet pregnancy and peripartum cardiomyopathy are uncommon separately, thus, the association of these two entities seems to be interesting.

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References

1. Okeke T, Ezenyeaku C, Ikeako L. Peripartum cardiomyopathy. Ann Med Health Sci Res 2013; 3: 313-9. [CrossRef]
2. Givertz MM. Cardiology patient page: Peripartum cardiomyopathy. Circulation 2013; 127: 622-6. [CrossRef]
3. Task Force on the Management of Cardiovascular Diseases During Pregnancy of the European Society of Cardiology. Expert consensus document on management of cardiovascular diseases during pregnancy. Eur Heart J 2003; 24: 761-81. [CrossRef]
4. Ansari AA, Fett JD, Carraway RE, Mayne AE, Onlamoon N, Sundstrom JB. Autoimmune mechanisms as the basis for human peripartum cardiomyopathy. Clin Rev Allergy Immunol 2002; 23: 301-24. [CrossRef]
5. Bhattacharyya A, Basra SS, Sen P, Kar B. Peripartum cardiomyopathy: a review. Tex Heart Inst J 2012; 39: 8-16.

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Omental infarction due to a patent foramen ovale after a long flight: a variant of economy class syndrome

To the Editor,

We describes a patient with omental infarction secondary to paradoxical embolism via patent foramen ovale (PFO) during a long flight that may be described as a variant of "economy class syndrome".

A-31-years old gentleman who is a flight attendant in Turkish Airlines presented with a sudden onset severe right upper quadrant abdominal pain during his flight from Japan-Osaka to İstanbul. After 2 days he was seen in emergency department with abdominal tenderness to palpation with guarding in the upper right quadrant. An abdominal tomographic scan revealed mesenteric fibro fatty adjacent to the liver segment III, which was interpreted as focal omental infarction.

He was fully investigated regarding the etiology of omental infarction including detailed hypercoagulable work up, however no abnormality was found. The possibility of PFO was considered and transcranial Doppler ultrasound (TCD) bubbles test was done and demonstrated strongly positive embolic signals during the Valsalva phase, suggesting severe right to left shunting Transesophageal echocardiography (TEE) revealed a positive saline contrast study demonstrating right to left shunting at the atrial level. Large PFO was considered as the cause of omental infarction. Given his occupation, percutaneous closure of PFO with Starflex absorbable device was inserted successfully. To our knowledge this is the first case to report omental infarction due to a paradoxical embolism. Omental infarction may occur due to torsion caused by adhesions, cysts and tumors, hernias; thrombosis caused by hypercoagulopathy and vascular abnormalities and congestion caused by right-sided heart failure (1, 2).

As in our patient prololonged airplane travel appears to increase the risk of venous thromboembolism (VTE) ; this association has been called "economy class syndrome" (3). A variant "economy class stroke syndrome" has been described in a case in whom ischemic stroke occurred during or immediately after a long flight presumably due to paradoxical embolism (4). Our case presented with abdominal pain secondary to omental infarction during a long flight due to a paradoxical embolism that may be another variant of "economy class syndrome".

As a peripheral embolism during or immediately after a long flight is suggestive of paradoxical embolism through the PFO. Moving about every hour or two, alcohol avoidance and using below-knee stockings may reduce thromboembolic complications during prolonged travel (4).

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References

1. Puylaert JB. Right-sided segmental infarction of the omentum: clinical, US, and CT findings. Radiology 1992; 185: 169-72. [CrossRef]
2. Park TU, Oh JH, Chang IT, Lee SJ, Kim SE, Kim CW, et al. Omental infarction: Case series and review of the literature. J Emerg Med 2012; 42: 149-54. [CrossRef]
3. Cruickshank JM, Gorlin R, Jennett B. Air travel and thrombotic episodes: the economy class syndrome. Lancet 1988; 2: 497-8. [CrossRef]
4. Isayev Y, Chan RK, Pullicino PM. "Economy class" stroke syndrome? Neurology 2002; 58: 960-1. [CrossRef]

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