

Portal vein and superior mesenteric vein thrombosis after cesarean hysterectomy

Sir,

A 25-year-old female with cesarean hysterectomy due to placenta accreta 20 days earlier in Alzahra hospital at September 2012 referred with intermittent epigastric and right upper quadrant (RUQ) pain from 2 weeks ago and recent fever. She did not have nausea or vomiting. She had mild tenderness in epigastric and RUQ without peritoneal irritation. Patient was febrile and anemic with stable vital signs. Liver tests and coagulations profile were normal. Abdominal ultrasound demonstrated echogenic thrombosis in superior mesenteric vein (SMV) along the route of splenic vein. Vascular flow on color Doppler was not visible. Multiple detector computed tomography (M.D.C.T) scan with contrast confirmed thrombus in the SMV, distal portion of splenic vein and portal vein.

Coagulation studies (prothrombine time (PT), partial thromboplastine time (PTT), platelets (Plt), protein S, protein C, lupus anticoagulant (LAC), anti-thrombin III, anti-cardiolipin antibodies (AC) ab, factor V leiden, homocysteine) were normal except mildly reduction in protein C activity. JAK 2V617F mutation was negative. Therapeutic intravenous heparin and antibiotics administered and symptoms reduced within 3 days. Anticoagulation therapy continued with warfarin. The patient discharged with a good general condition. Abdominal Doppler ultrasonography done 6 months later showed the splenic vein and superior mesenteric vein and all hepatic veins were normal.

Portal vein thrombosis is a rare clinical condition. Early diagnosis with modern techniques is possible only if we keep this condition in mind. This patient did not have any known associations or predisposing factors for portal vein thrombosis or any medical history of

thrombosis or bleeding disorders. The only risk factors of thrombosis were cesarean delivery and reduced protein C activity.

In patient with acute abdominal symptoms (anorexia, RUQ or epigastric pain, vomiting), the possibility of acute portal vein thrombosis should be considered.^[1]

Complete or extensive reperfusion can be achieved with early treatment with anticoagulant agents.^[2] Other treatments included: Fibrinolytic infusion by systemic route, transhepatically, or via superior mesenteric artery,^[3,4] Percutaneous interventional techniques such as balloon dilatation and stenting.^[5]

In conclusion, portal vein thrombosis should be suspected in puerperium period in a patient with abdominal pain and fever to avoid dangerous progression to life-threatening conditions like mesenteric infarction.

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REFERENCES

1. Chawla Y, Duseja A, Dhiman RK. Review article: The modern management of portal vein thrombosis. *Aliment Pharmacol Ther* 2009;30:881-94.
2. Ponziani FR, Zocco MA, Campanale C, Rinninella E, Tortora A, Maurizio L, *et al.* Portal vein thrombosis: Insight into physiopathology, diagnosis and treatment. *World J Gastroenterol* 2010; 16:143-55.
3. Distefano G, Rodono A, Cilauro S, Saporito A, Pennisi F, Smilari P, *et al.* Fibrinolytic treatment of portal vein thrombosis after umbilical catheterization using systemic urokinase. *Pediatr Int* 2000; 42:82-4.
4. Chen C. Direct thrombolytic therapy in portal and mesenteric vein thrombosis. *J Vasc Surg* 2012; 56:1124-6.
5. Kim KR, Ko GY, Sung KB, Yoon HK. Percutaneous transhepatic stent placement in the management of portal venous stenosis after curative surgery for pancreatic and biliary neoplasms. *AJR Am J Roentgenol* 2011;196:W446-50.