



# Adult Diffuse Hepatic Hemangiomas: A Rare Cause of Dilated Cardiomyopathy and Sudden Cardiac Arrest

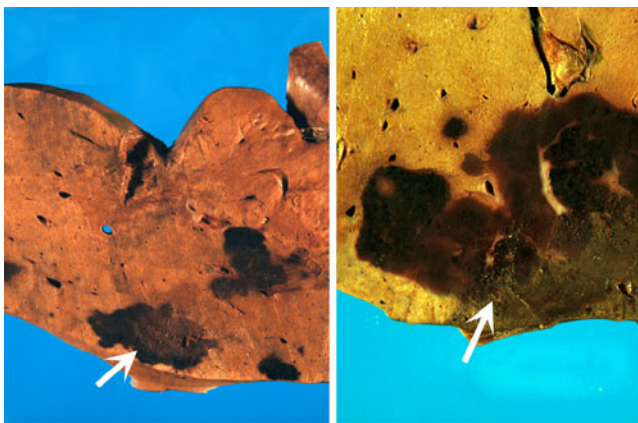
Rodjawan Supakul, MD<sup>1</sup>, Saeed T. Vakili, MD<sup>2,3</sup>, and Suthat Liangpunsakul, MD, MPH<sup>1,3</sup>

<sup>1</sup>Division of Gastroenterology and Hepatology, Department of Medicine, Indiana University Hospital, Indianapolis, IN, USA; <sup>2</sup>Department of Pathology & Laboratory Medicine, Indiana University School of Medicine, Indianapolis, IN, USA; <sup>3</sup>Roudebush Veterans Administration Medical Center, Indianapolis, IN, USA.

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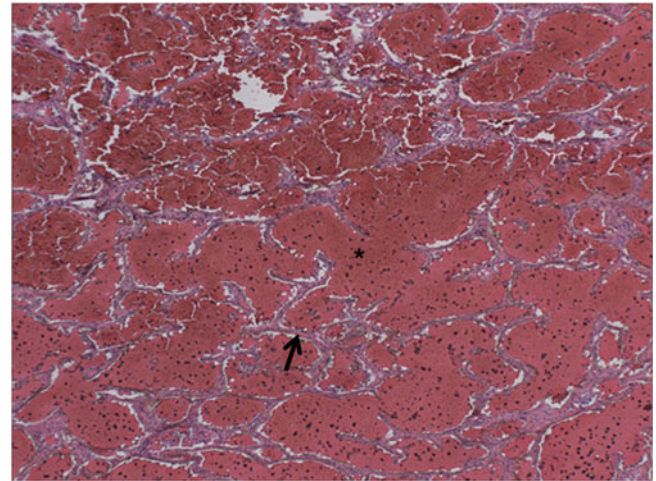
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**Figure 1.** Multiple irregular, well-circumscribed, dark brown lesions (arrow) were seen in the liver parenchyma. The lesions ranged from 0.5-10 cm in greatest dimension.

A 53-year-old man presented with two months of fatigue and dyspnea on exertion, and was found to have hepatomegaly and hypotension (71/30 mmHg). Initial tests showed lactic acidosis with normal cardiac enzymes. Computed tomography of the abdomen revealed diffuse, hypodense, hepatic lesions without ischemic bowels. Shortly after admission, he developed cardiopulmonary arrest with ventricular fibrillation and expired despite aggressive medical support. Postmortem examination demonstrated dilated cardiomyopathy without coronary atherosclerosis (heart weight 785 g, normal 365±71 g) and hepatomegaly with diffuse hemangiomas (liver weight 4,455 g, normal 1,677±396 g, Fig. 1).<sup>1</sup>



**Figure 2.** Microscopic examination revealed cavernous vascular spaces (asterisk) separated by thin fibrous septae lined by endothelial cells (arrow). These findings confirmed the diagnosis of hepatic hemangiomas.

Diffuse hepatic hemangiomas is extremely rare.<sup>2</sup> The histologic characteristics include dilated vascular channels lined with flat endothelial cells (Fig. 2). The etiologies are poorly understood, though its association with the use of estrogen and metoclopramide has been described.<sup>3,4</sup> The two most common causes of death are cardiomyopathy (from massive hepatic arteriovenous shunting) and cirrhosis.<sup>5</sup> Surgical resection is an option in selected cases with small lesions without cirrhosis.<sup>5,6</sup> Most cases are inoperable because of poor delineation of the tumor border and bleeding risk. Other anecdotal therapies include hepatic artery ligation and radiation.<sup>6</sup> Prognosis depends on the area of hepatic involvement and cardiac function.

**Conflict of Interest:** The authors declare that they do not have a conflict of interest.

**Corresponding Author:** Suthat Liangpunsakul, MD, MPH; Division of Gastroenterology and Hepatology, Department of Medicine, Indiana University Hospital, Indianapolis, IN 46202, USA (e-mail: sliangpu@iu.edu).

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