Diagnosis and Natural History of Hemangiomas

Chapter: Diagnosis and Natural History of Hemangiomas
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Infantile hemangioma presents in diverse forms. Demographic patterns suggest clues to its pathogenesis. This most common tumor of infancy is far more frequent in females; the incidence is even higher when occurring in association with malformations in the head/neck or ventral-caudal regions; however, the sex incidence is the same when the tumor arises in low birth weight preemies. Hemangiomas present most often in skin, but also can arise in visceral organs, particularly when they are multiple. Curiously, these tumors rarely occur in lungs. Multiple hemangiomas are also more frequent in preterm infants, but the female preponderance in preemies is less than in term infants. Hemangiomas can be detected prenatally and present fully-grown at birth in two forms: rapidly-involuting congenital hemangioma (RICH) and non-involuting congenital hemangioma (NICH). These rare congenital hemangiomas behave differently than the common infantile hemangioma that appears postnatally. Hemangioma’s phenotypes are protean: macular, reticular, superficial/deep, single/multiple, tiny to large, lesions that arrest in growth, and those that spread widely to involve an entire region of the body. Hemangiomas can mimic non-vascular tumors and other vascular anomalies. Two expressions encompass the spectrum: “Not all hemangiomas look like strawberries” and “Not all strawberries are hemangiomas.”
PURPOSE: To investigate the natural history and diagnosis of cavernous hemangioma in the cirrhotic liver with computed tomography (CT) and magnetic resonance (MR) imaging. MATERIALS AND METHODS: Imaging and pathologic findings of 21 hemangiomas in 17 patients were retrospectively reviewed. CT of the liver was performed in all patients; MR imaging, in four. Cirrhosis was confirmed histologically in all patients, and the diagnosis of hemangioma was based on histopathologic findings (15 patients, 18 hemangiomas) or strict imaging criteria (two patients, three hemangiomas). Ten patients underwent