Splenic infarction diagnosed by contrast-enhanced ultrasound in infectious mononucleosis – An appropriate diagnostic option: A case report with review of the literature

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Infectious mononucleosis is caused by Epstein-Barr virus (EBV) infection. Although typically self-limiting, complications such as splenic infarction and splenic rupture are described. A 17-year-old man presented in the emergency department due to a 3 days history of fever with chills, soreness, fatigue, and loose stool. Ultrasound examination showed a homoechogenic splenomegaly. Viral enteritis was diagnosed and the patient was dismissed. Six days later, he reassessed due to increasing left upper quadrant abdominal pain. Ultrasound showed inhomogeneous splenomegaly with irregular hypoechogenic subcapsular lesions. Contrast-enhanced ultrasound (CEUS) characterized the lesions as not perfused tissue until the late venous phase, compatible with spleen infarctions. Serologic studies were positive for EBV. In the literature, splenic infarction is considered under-recognized. Contrast-enhanced computed tomography (CECT) and magnetic resonance imaging are associated with costs and radiation (CECT). B-mode ultrasound examination is usually used as the first imaging modality, although showing a poor sensitivity in the question of splenic lesions/infarctions. CEUS has shown instead very good sensitivity and does not harm. Therefore, we recommend CEUS examination as the first imaging modality if suspicion of spleen infarction arises, especially when B-mode ultrasound is normal.