



Playboy bunny sign

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“Playboy bunny sign” describes the appearance of dilated hepatic veins and intrahepatic inferior vena cava (IVC) in congestive heart failure on abdominal ultrasound [1, 2]. The word “Bunny” is used to describe the young rabbit informally (Fig. 1). In passive hepatic congestion, the dilated IVC and dilated hepatic veins mimic the head and ears of a bunny (Fig. 2). It was originally called as “Playboy bunny sign” in 1983 by Bartrum and Crow to describe the confluence of hepatic veins with IVC in normal subjects [3]. ‘Playboy Bunny’ refers to the waitress in the famous playboy clubs who wore bunny suits. Other names for this appearance include moose’s head and Deer’s horns sign [2]. Although ‘Playboy Bunny’ was originally described for the appearance of normal hepatic venous confluence, it is now being used to denote the dilated hepatic veins at the confluence typically seen in passive hepatic congestion.

Passive hepatic congestion refer to the dilatation of hepatic veins and intrahepatic IVC with venous stasis due to elevated central venous pressure from various cardiopulmonary diseases like congestive heart failure, constrictive pericarditis, cardiomyopathy, tricuspid regurgitation, and cor pulmonale. Chronic hepatic congestion leads to hypoxia and eventual hepatocyte injury resulting in cardiac cirrhosis. Patients present with classical features of cardiac failure and can have right upper quadrant pain due to stretching of liver capsule for congestive hepatomegaly [4].

Ultrasound is a useful modality in the diagnosis of congestive hepatomegaly in patients presenting with right upper quadrant pain or elevated liver enzymes. Classical findings included dilated hepatic veins (> 6 mm), dilated

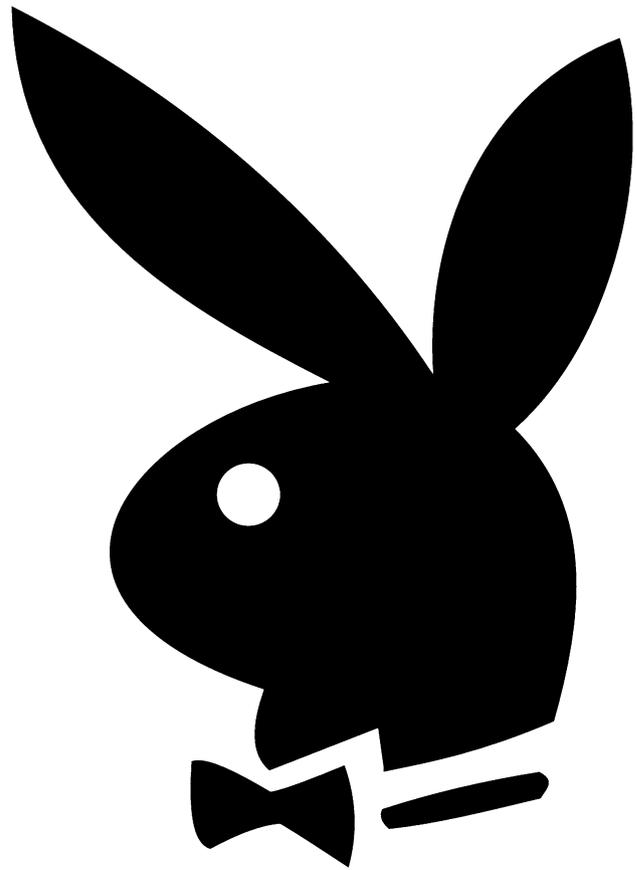


Fig. 1 Image of playboy bunny logo. Source <https://pixabay.com/en/playboy-bunny-logo-club-men-s-club-42527/>. Accessed 19 November 2018

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IVC, hepatomegaly, and ascites. Hepatic venous dilatation increases with the more advanced heart failure. Doppler shows loss of normal phasic variations with respiration and loss of the normal triphasic hepatic venous waveform [5].

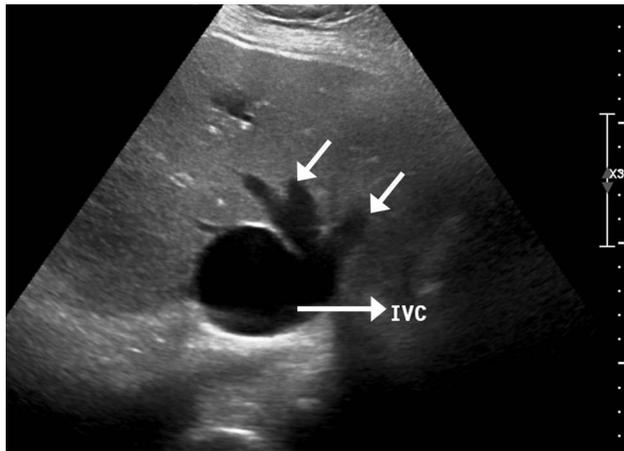


Fig. 2 Ultrasound of the liver showing dilated IVC (long arrow) and dilated hepatic veins (short arrows) mimicking the head and ears of a bunny, respectively

Compliance with ethical standards

Conflict of interest All the authors declare that they have no conflicts of interest.

Research involving human participants and/or animals All procedures performed in studies involving human participants were in accordance

with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

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