



## The “kissing sign” of liver and spleen

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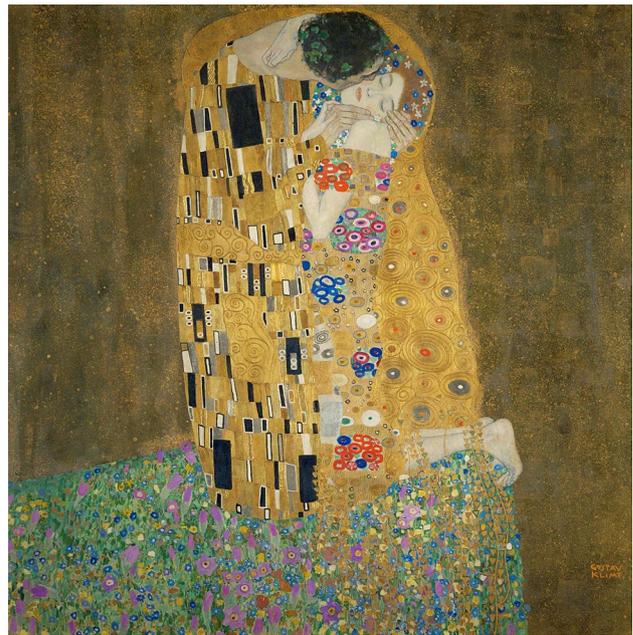
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The “kissing sign” of liver and spleen is a radiological finding which can be detected in patients with severe hepatomegaly, splenomegaly, or both conditions. It describes an enlargement of liver and/or splenic parenchyma, with both organs touching each other [1]. The kissing liver and spleen are similar to the lovers in the Klimt’s “The Kiss” oil painting (Fig. 1), depicted in a tight embrace placed in an abstract place, with golden light surrounding the scene.

The “kissing sign” of liver and spleen has been described on ultrasound, CT (Fig. 2) and MR imaging [2–4].

The identification of this sign can be correlated with diffuse liver diseases with various clinical significance, like cirrhosis, metabolic, vascular, toxic, infectious, and diffuse neoplastic diseases [1]. Splenomegaly, as indirect indicator of diffuse hepatocellular disease, may also result in the “kissing sign” [1]. However, this latter is not pathognomonic of liver disease, since it can be recognized in many systemic disorders, such as infectious (e.g., acute mononucleosis), hematologic (e.g., thalassemia, leukemia, lymphoma), and cardiovascular diseases (e.g., heart failure, pulmonary embolism) [4, 5]. Moreover, severe splenomegaly can also be due to primary splenic causes, like tumors and splenic infarctions, or it can remain idiopathic [5].



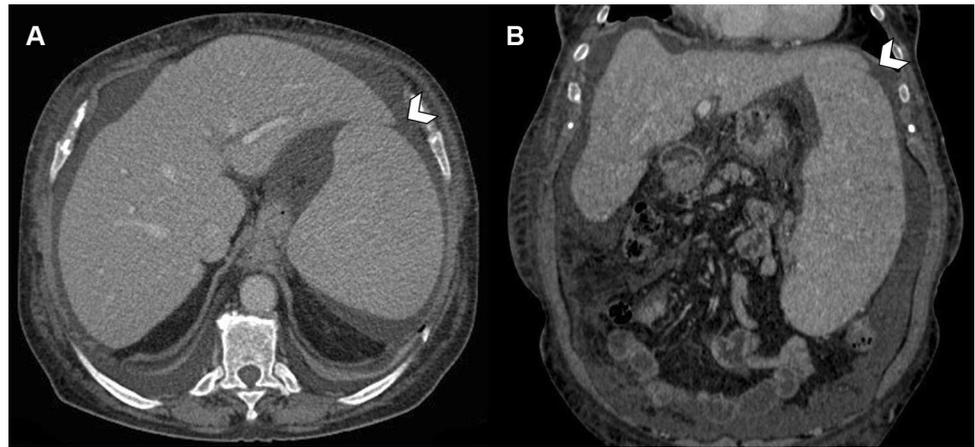
**Fig. 1** The kiss—Gustav Klimt, 1907-1908 (oil on canvas). Public domain image ([https://commons.wikimedia.org/wiki/File:Klimt\\_-\\_The\\_Kiss.jpg](https://commons.wikimedia.org/wiki/File:Klimt_-_The_Kiss.jpg)). Accessed 21/01/2019

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**Fig. 2** Axial (a) and coronal reformatted (b) contrast-enhanced CT images in a 75-year-old woman show an enlarged left hepatic lobe, which is seen to about a severely enlarged spleen in the midline (arrowheads), giving the “kissing sign” of the liver and spleen. Note moderate volume of ascites in the upper abdomen, surrounding the liver and the spleen



Although mostly seen in hepatosplenomegaly, the “kissing sign” is not always pathologic. With more frequent imaging, radiologists may occasionally encounter this sign as an incidental finding also in healthy individuals, particularly in young patients, low body fat or BMI.

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### Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interests.

**Research involving Human Participants and/or Animals** This article does not contain any studies with human participants or animals performed by any of the authors.

**Informed consent** Statement of informed consent was not applicable since the manuscript does not contain any patient data.

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