



Sentinel clot sign in hemoperitoneum

Mohd Ilyas¹ · Muiez Bashir¹ · Irfan Robbani¹ · Sheikh Riaz Rasool¹ · Faiz Altaf Shera¹ · Imran Hamid¹

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The “sentinel clot sign” is defined as the highest attenuation hematoma in proximity to an organ that is the primary source of bleeding in hemoperitoneum (Fig. 1a, b). The body attempts hemostasis by forming a clot at the site of injury; thus, the highest attenuation area is the nearest one to the source.

On computed tomography, acutely clotted blood has higher attenuation value than nonclotted blood or chronic hemorrhage, which forms the basis of the “sentinel clot sign” [1]. This sign can be used to trace the source of occult hemorrhage in cases of abdominal trauma [2], and can also be important in cases of nontraumatic hemoperitoneum. An additional sign that can indicate a bleeding source is the extravasation of contrast material at that site [3].



Fig. 1 **a** Axial noncontrast CT image showing a large hyperdense clot in the peritoneum (red arrow), in a case of mesenteric injury. **b** Axial image showing the attenuation value of the hyperdense clot compared to lower attenuation surrounding hemoperitoneum, a clue to the primary bleeding site

✉ Mohd Ilyas
ilyasmir40@gmail.com

¹ Department of Radiodiagnosis, Sher-i-Kashmir Institute of Medical Sciences, Srinagar, Jammu and Kashmir 190011, India

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Compliance with ethical standards

Ethical approval 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.

Conflict of interest All authors declare that there is no conflict of interest.

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