



# A Clinician's Eyes in Hemoperitoneum: Cullen's and Grey Turner Sign

**Harikrishnan P\*; Divya Kochhar; Shacha Wangmo**

Armed Forces Medical College, Pune, India.

**\*Corresponding Author(s): Harikrishnan P**

Armed Forces Medical College, Pune, India.

Email: harikrisshh1991@gmail.com

Received: Apr 21, 2021

Accepted: may 17, 2021

Published Online: May 19, 2021

Journal: Journal of Case Reports and Medical Images

Publisher: MedDocs Publishers LLC

Online edition: <http://meddocsonline.org/>

Copyright: © Harikrishnan P (2021). *This Article is distributed under the terms of Creative Commons Attribution 4.0 International License*

**Keywords:** Intraperitoneal haemorrhage; Grey turner; Cullen's; Hemoperitonneum.

## Case report

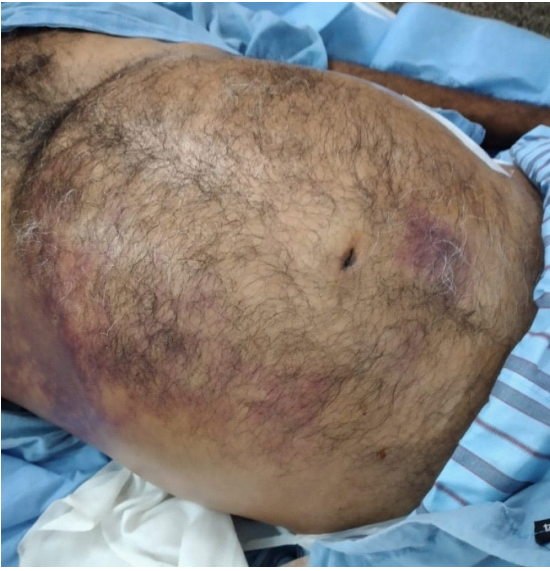
Cullen's and Grey turner signs are both dermatological manifestations of retroperitoneal or intraperitoneal haemorrhages. Cullen's sign is characterised by periumbilical ecchymosis while in Grey Turner sign there is involvement of the flanks. Cullen's sign, first described in 1918 by Thomas Stephen Cullen a Gynaecologist, as a bluish discoloration of periumbilical skin in patients of ruptured ectopic pregnancy due to retroperitoneal blood that tracks along the gastrohepatic and falciform ligament to the umbilicus [1]. Grey Turner sign, first reported by George Grey Turner an English surgeon in 1920 as "Dirty Green" discoloration of lateral abdominal wall in patients of acute pancreatitis [2]. It is believed to be due to the diffusion of blood from posterior pararenal space to lateral edge of quadratus lumborum muscle eventually entering the muscles of abdomi-

nal wall and subcutaneous tissue of the flank through defect in transversalis fascia [3].

We present two cases with coexisting Cullen's and Grey Turner signs in two different intra-abdominal pathologies. Our first patient was a 62 years old male patient with metastatic carcinoma of Gall bladder with malignant haemorrhagic ascites. On abdominal examination he was found to have ecchymotic patches around the umbilicus and right flank (Figure 1). Similarly, in our second patient, a 57 years old admitted as a case of severe acute pancreatitis who developed abdominal distension two days post admission. On examination he was found to have grade 3 ascites along with periumbilical and flank ecchymosis (Figure 2).



**Cite this article:** Harikrishnan P, Kochhar D, Wangmo S. A Clinician's Eyes in Hemoperitoneum: Cullen's and Grey Turner Sign. J Case Rep Med Images. 2021; 4(1): 1077.



**Figure 1:** Cullen's (Periumbilical) and Grey Turner sign (flank) in a case of Metastatic Carcinoma Gall Bladder



**Figure 2:** Cullen's (Periumbilical) and Grey Turner sign (flank) in a case of Severe Acute Pancreatitis.

### Ethics statement

Written informed consent for publication of photographs was obtained from the patient and available upon request.

### Author contributions

All authors contributed towards collection of data, history taking and drafting of the manuscript.

### References

1. Epperla N, Mazza JJ, Yale SH. A Review of Clinical Signs Related to Ecchymosis. *WMJ*. 2015; 114: 61-65.
2. Verghese A, Charlton B, Cotter B, Kugler J. A history of physical examination texts and the conception of bedside diagnosis. *Trans Am Clin Climatol Assoc*. 2011; 122: 290-311.
3. Bem J, Bradley EL 3rd. Subcutaneous manifestations of severe acute pancreatitis. *Pancreas*. 1998; 16: 551-555.