

Title: Uncommon etiology of Cullen sign and Grey Turner sign

Authors: Marta Álvarez-García, Lola Otegui Martínez-Peñuela, Rocío Calvo Hernández , Juan Carlos Porres Cubero

DOI: 10.17235/reed.2023.9655/2023 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Álvarez-García Marta, Otegui Martínez-Peñuela Lola, Calvo Hernández Rocío, Porres Cubero Juan Carlos. Uncommon etiology of Cullen sign and Grey Turner sign. Rev Esp Enferm Dig 2023. doi: 10.17235/reed.2023.9655/2023.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



CC 9655 inglés

Uncommon etiology of Cullen sign and Grey Turner sign

Marta Álvarez-García, Lola Otegui, Rocío Calvo, Juan Carlos Porres

Digestive Diseases Service. Hospital Universitario Fundación Jiménez Díaz. Madrid, Spain

Correspondence: Marta Álvarez García e-mail: Martaag97@gmail.com

Conflict of interest: the authors declare no conflict of interest.

Keywords: Cullen sign. Grey Turner sign. Ecchymosis.

Dear Editor,

The Cullen sign and Grey Turner sign are cutaneous ecchymoses located in the periumbilical region and tissues flanks along the lower portion of the abdomen, respectively. Both have been observed in < 1 % of individuals with acute pancreatitis, suggesting a poor prognosis in terms of gravity and mortality. However, these signs are not exclusive to acute pancreatitis, as they can appear in other entities such as ruptured ectopic pregnancy, aortic aneurysm, rectus abdominis muscle hematoma, perforated duodenal ulcer, common bile duct rupture and biliary peritonitis, idiopathic perirenal hemorrhage, infectious mononucleosis with splenic rupture, metastatic esophageal and thyroid cancer, non-Hodgkin lymphoma, amoebic liver abscess, portal hypertension and liver tumor disease. Based on the review of the literature, it is clear that Cullen and Grey Turner signs are neither sensitive nor specific for acute pancreatitis. Therefore, it may be best to relate these findings in the physical examination to conditions associated with abdominal pathology and retroperitoneal hemorrhage (1-3).

Case report

We report the case of a 60-year-old Spanish female, with a history of squamous small cell neuroendocrine lung carcinoma with hepatic extension in follow-up by palliative care services. Due to disease progression after two palliative chemotherapy sessions, the patient came to the Emergency Room with jaundice and abdominal pain in superior regions. On physical examination, notable findings included ecchymoses in the right flank and periumbilical region. Laboratory findings showed elevated bilirubin and transaminase levels, as well as a small increase in the serum amylase and lipase levels. Cholangioresonance was performed to discard acute biliary pancreatitis. The imaging revealed no enlargement of the pancreas, dilatation of the common bile duct without visible stones, and a liver full of new cancerous liver implants. These findings were consistent with diffuse distribution metastatic lesions, concluding the progression of liver disease.

References

Wright WF. Cullen sign and Grey Turner sign revisited. J Am Osteopath Assoc
2016;116(6):398-401.

2. Cienfuegos JA, Valentí V, Rotellar F. Acute pancreatitis: an opportunity for gastroenterology hospitalists? Rev Esp Enferm Dig 2022;114:73-5.

3. Kashiwagi R, Shimamura Y, Imamura K. Uncommon etiology of Cullen's sign and Grey Turner sign. J Gen Fam Med 2022;23(4):282-3.



Fig. 1. Physical examination showing ecchymoses around the periumbilical region (Cullen sign) and in the right flank (Grey Turner sign).