

PORCELAIN GALLBLADDER SIGN

Zahi Hiba*, Hosni Abdelmoughit, Jerguigue Hounaida, Latib Rachida and Omor Youssef

National Institute of Oncology, Rabat, Morocco.

*Corresponding Author: Zahi Hiba

National Institute of Oncology, Rabat, Morocco.

Article Received on 07/06/2022

Article Revised on 27/06/2022

Article Accepted on 17/07/2022

ABSTRACT

Porcelain gallbladder is a revealing sign of wall calcifications interesting gallbladder, most often it is found accidentally during routine checkup. The diagnosis is based on ultrasound and sometimes computed tomography.

Introduction: Porcelain gallbladder is one of the rare manifestations of chronic gallbladder inflammation. This chronic inflammation is supposed to increase the risk of gallbladder carcinoma. Patients with a porcelain gallbladder are often asymptomatic. Ultrasound and CT represent the accurate tool for diagnostic. **Case report:** We present case of 60 years old women followed for cervix carcinoma, in the context of the extension work up. CT demonstrates circumferential mural calcifications and ultrasound showed echoes and posterior dense shadowing, with no delineation of the gallbladder wall relating to porcelain gallbladder sign. (figure1) **Discussion:** Porcelain gallbladder sign refers to the incrustation of calcium in the wall of gallbladder. This condition is coincidentally found, with a female predominance and it's usually asymptomatic. Imaging has prominent role in the diagnosis of this issue. The Ultrasound appearances has been analyzed depend on the extent and nature calcifications (1). Type I is a hyperechoic semilunar structure with posterior acoustic shadowing, type II is a curvilinear echogenic structure with acoustic shadowing, and type III are irregular clumps of echoes with posterior acoustic shadowing (2). CT scan show thin calcifications located in wall gallbladder, and MRI is helpful for differential diagnosis. (3) In some cases gallbladder carcinoma is developed from calcified condition. The incidence of gallbladder carcinoma after wall calcification remains rare and range to 2%-8% (4) (5). The mechanism of this transformation is undetermined (6). **Conclusion:** Porcelain gallbladder is rare condition defined as calcium deposits interesting the gallbladder wall. Ultrasound showed echoes and posterior dense shadowing and CT demonstrates circumferential mural calcifications.

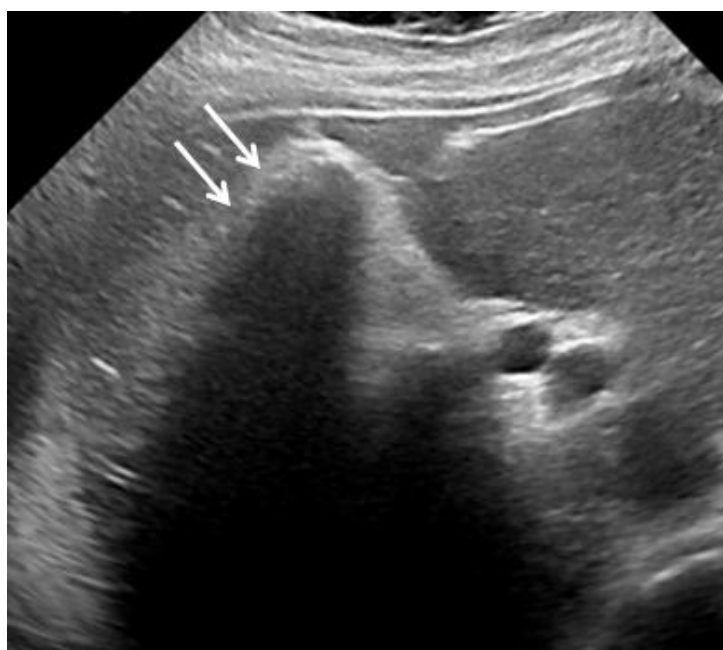


Figure 1: Porcelain gallbladder sign: ultrasonography showed echoes and posterior dense shadowing, with no delineation of the gallbladder wall (arrow).

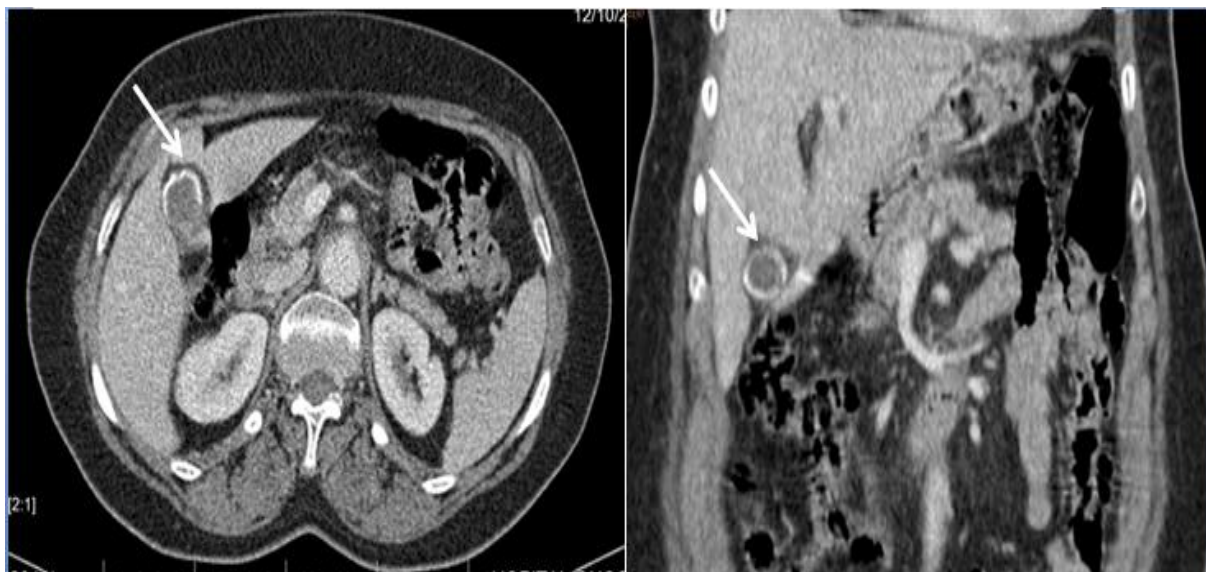


Figure 2: Abdominal CT revealing circumferential calcification of gallbladder wall.

Conflict of interest statement: The authors declare no conflicts of interest.

ACKNOWLEDGEMENT: I would like to express my gratitude to my professors and all the colleagues who participated in the completion of this work.

Funding acknowledgement: This research received no specific external funding.

REFERENCES

1. Kane RA, Jacobs R, Katz J, Costello P. Porcelain gallbladder: ultrasound and CT appearance. *Radiology*, 1984 Jul; 152(1): 137-41.
2. Morimoto M, Matsuo T, Mori N. Management of Porcelain Gallbladder, Its Risk Factors, and Complications: A Review. *Diagnostics*, 2021 Jun; 11(6): 1073.
3. Phemister DB, Rewbridge AG, Rudisill Jr H. Calcium carbonate gall-stones and calcification of the gall-bladder following cystic-duct obstruction. *Annals of Surgery*, 1931 Oct; 94(4): 493.
4. Opatrny L. Porcelain gallbladder. *CMAJ.*, 2002 Apr 2; 166(7): 933.
5. Goel A, Agarwal A, S Bhagat T, Kumar G, K Gupta A. Porcelain Gallbladder. *Euroasian J Hepatogastroenterol*, 2017 Jul; 7(2): 181-2.
6. Calomino N, Scheiterle ML, Fusario D, La Francesca N, Martellucci I, Marrelli D. Porcelain gallbladder and its relationship to cancer. *European Surgery*, 2021 Dec; 53(6): 311-6.