

## Porcelain Gallbladder

Porcelain gallbladder is a condition caused by chronic inflammation of the gallbladder, often related to gallstones. Its significance lies in the fact that there has been shown to be a link between porcelain gallbladder and increased risk of gallbladder adenocarcinoma. Specifically, some studies report an approximately 2-3% incidence of gallbladder carcinoma in patients with porcelain gallbladder. Patients are frequently asymptomatic and the disease identified incidentally on abdominal imaging, which will show a gallbladder with rim-calcifications along most of the wall, giving the appearance of an egg-shell or "porcelain" gallbladder. Symptomatic patients will present with complaints typical for gallbladder inflammation, such as right-upper quadrant pain. Patients identified to have porcelain gallbladder should undergo prophylactic cholecystectomy regardless of symptoms in order to reduce risk of malignancy.



PLAY PICMONIC

### Characteristics

#### Associated with Chronic Cholecystitis or Cholelithiasis

##### Crone holding flaming gallbladder and stone

Porcelain gallbladder is associated with and thought to be a result of chronic gallbladder inflammation. The vast majority of patients found to have porcelain gallbladder also have gallstones, which likely contribute to the chronic inflammation. <br>

#### Increased Risk of Gallbladder Adenocarcinoma

##### Add-car-gnome

The clinical significance of porcelain gallbladder lies in the fact that it is thought to be associated with an increased risk of adenocarcinoma, with a reported incidence of malignancy of approximately 2-3% according to some studies.

### Presentation

#### RUQ Pain

##### RUQ Pain-bolts

In patients who do have symptoms as a result of porcelain gallbladder, complaints will usually be non-specific and typical for any inflammatory gallbladder condition. Most commonly, symptomatic patients will report right-upper quadrant abdominal pain, though in some cases may also present with fever or jaundice due to biliary duct obstruction due to stones. <br>

#### Usually Asymptomatic

##### Thumbs up

Patients with porcelain gallbladder are frequently asymptomatic, as the chronic and indolent inflammation may not be severe enough to trigger acute symptomatic flares.

#### Often Found Incidentally

##### Surprised doctor with magnifying glass

Porcelain gallbladder is most commonly diagnosed due to incidental findings on abdominal imaging. Porcelain gallbladder appears on plain radiograph as curvilinear or rim-like calcifications of the gallbladder wall.<br>

### Workup/Management

#### Confirm with CT or Ultrasound

##### Cat and ultrasound machine

Porcelain gallbladder is frequently found incidentally on abdominal imaging, often on plain abdominal radiograph. However the findings on plain radiograph that may be representative of porcelain gallbladder may also be seen if the gallbladder is full of bile that is supersaturated with calcium salts, or as a result of calcified gallstones or cysts and calcifications of nearby organs. For this reason, a CT or ultrasound of the abdomen should be obtained to confirm the suspicion of porcelain gallbladder. Definitive diagnosis however can only technically made on histopathology following cholecystectomy. <br>

## **Prophylactic Cholecystectomy**

[Surgeon-purple-axes](#)

Most patients with confirmed suspicion of porcelain gallbladder and no serious surgical contraindications should undergo cholecystectomy regardless of if they have symptoms or not. This is in order to lower the risk of developing gallbladder adenocarcinoma in the future.