

Chapter 80

Calcifications



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What are the categories of calcification based on morphology?	Concretions, conduit wall calcification, cyst wall calcification, and solid mass calcification
How can calcification be classified based on anatomy?	Into four abdominal quadrants
Define concretions with examples.	Discrete precipitates; gallstones, renal, ureteral or bladder stones, fecalith, appendicolith, phlebolith
Give an example of conduit wall calcification.	Atherosclerotic plaquing of the abdominal aorta
What are the examples of cyst wall calcification?	Aneurysmal calcification and porcelain gallbladder
Describe the usual pattern of solid mass calcification with examples.	Extensive but variable; normal lymph node or after infection such as TB and leiomyoma

(continued)

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Calcification of which structures is considered clinically insignificant on abdominal imaging?	Costal cartilage, mesenteric lymph nodes, pelvic vein clots (phleboliths), prostate gland
Name some structures, calcification of which is considered pathological on abdominal imaging?	Pancreas, kidney, blood vessels, gallbladder, uterus, urinary bladder, appendix
What is the best diagnostic imaging modality in general for assessing abdominal calcifications?	Ultrasound or CT
What is the imaging modality of choice for suspected gallstones?	Ultrasound
Which imaging modality can differentiate between phlebolith and renal/ureteric calculi?	CT
What are the characteristic features used to differentiate between phlebolith and renal/ureteric calculi?	Phleboliths are ovoid with lucent center; renal/ureteric calculi are irregular with uniform density.
What is Monckeberg's [medial] calcification?	Calcification of tunica media of medium-sized muscular vessels
Describe vascular calcification patterns.	Tram-track for non-aneurysmal; fusiform for aneurysmal

Further Reading

- Bassano JM. Abdominal calcifications and diagnostic imaging decision making: a topic review. *J Chiropr Med.* 2006;5(1):43–52.
- Brant WE, Helms CA, editors. *Fundamentals of diagnostic radiology.* Philadelphia: Lippincott Williams & Wilkins; 2012.
- James B, Kelly B. The abdominal radiograph. *Ulster Med J.* 2013;82(3):179.
- Bickle IC, Kelly B. Abdominal x rays made easy: calcification. *Student BMJ.* 2002;10:272–4.