Interesting cases – pitfalls and errors

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• The real-time ultrasound picture that appears on the screen is influenced by numerous components such as attenuation, dispersal and refraction of the ultrasound beams.

• This can cause artifacts that do not represent true information.

• Usually artifacts can be easily recognized due to their non-biological properties, strange geometry, failure to be reproduced in different scanning sections.
• Some of the artifacts are useful for the ultrasound diagnosis, due to the fact that they give information but not directly.

• Posterior shadowing

• Acoustic amplification
Posterior shadowing
Acoustic amplification
False images

- Sludge or not?
False images

- Mirror images
Pitfalls and errors

- The superficial ultrasound examination, “in a hurry” is the most frequent source of errors.
- Lack of experience.
- The incomplete examination of the patient.
- The examination in inappropriate conditions regarding the patient and also the environment.
- The lack of correlation between the clinical information and the ultrasound images.
Acute colecistitis?
Stone in the CBD?
Gallbladder stone?
After colecistectomy
After colecistectomy
Normal liver?
Normal liver?
Normal left kidney?
Cyst?