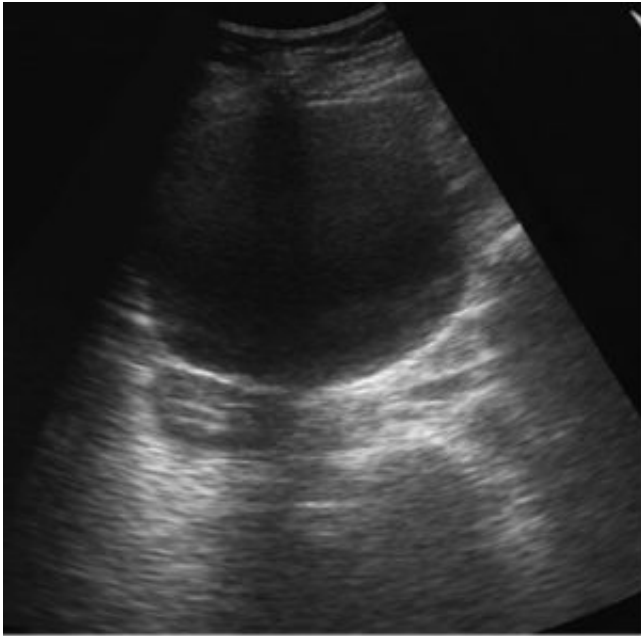


Simple Hepatic Cysts : Percutaneous treatment

Cysts are fluid filled cavities that can be found anywhere in the body as well as in liver. Simple hepatic cysts are common in general population and pose no risk for malignancy. Although they usually cause no symptoms, they can become symptomatic (bloating, nausea, vomiting, abdominal pain etc) especially upon reaching large sizes. When they become symptomatic, they have to be treated.



Ultrasonography image of liver shows simple cyst seen as an anechoic (black) lesion with well-defined borders.

Old tradition for treatment of symptomatic simple hepatic cysts included open surgical methods: Surgeon reaches the cyst through an abdominal incision and eliminate the cyst via different methods. Laparoscopic surgeries have been defined as an alternative to open surgeries nevertheless they still have long hospital stay periods with frequent complications during and after surgery.

New treatment methods employing imaging guidance have emerged. Without any surgical incision, under guidance of various imaging techniques (ultrasonography, computed tomography and fluoroscopy), lesions can be localized and treated percutaneously. Symptomatic simple hepatic cysts are no exception since they can be treated under imaging guidance with single session. With single session percutaneous treatment, there is no need for subsequent additional procedures. Under imaging guidance, a needle, then a wire, finally a thin tube called catheter is introduced into

the cystic cavity. Under fluoroscopy, cyst is ensured to have no communication with other anatomical structures such as biliary system and abdominal cavity. After draining some of cystic content, high concentration alcohol (usually 95 % - 99 % alcohol) is injected in order to prevent recurrence and refilling of cyst.



Fluoroscopic image taken during treatment shows cyst cavity filled with contrast given through inserted needle.

Then catheter is removed and patients are required to attend follow-up visits. During follow-up visits they are evaluated via imaging (usually either ultrasonography or computed tomography) if there is any newly emerging cyst or a cavity growing in the previously treated site.

Until now, all previous studies utilized catheter during imaging guided drainage of symptomatic simple hepatic cysts. For the first time we opted out catheter use and drained the cystic cavity, give alcohol inside the cavity with just a thin needle. We compared our results of single session with catheter and single session without catheter just with needle. And we found similar success rates in both groups. We also found less complication and shorter hospital stay of only 1 day after procedure.

Therefore symptomatic simple hepatic cysts can be treated via aspiration and then alcohol injection into cystic cavity by only needle. Procedure is done without any incisions and results with less complications and shorter hospital stay periods.

Publication

[Percutaneous Treatment of Simple Hepatic Cysts: The Long-Term Results of PAIR and Catheterization Techniques as Single-Session Procedures.](#)

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