

Large liver abscess after endoscopic ultrasound-guided fiducial placement

Dear Editor,

Endoscopic ultrasound-guided fiducial placement (EUS-FP), performed to facilitate stereotactic body radiation therapy, is feasible and safe.^[1,2] Antibioprophylaxis is not recommended currently by existing guidelines.^[3] We report the first case of a large liver abscess and sepsis after EUS-FP.

A 67-year-old female with colon cancer and a single, metastatic, 3 cm left lobar liver lesion was referred for EUS-FP. A single fiducial was back-loaded into the 19-gauge needle (Cook, EchoTip®); the tip was then sealed with sterile bone wax [Figures 1 and 2]. After placement of the first fiducial, the needle was then withdrawn from the scope to back-load the next fiducial. Three fiducials were placed in total using this method. No prophylactic antibiotics were administered.

Six weeks postprocedure, the patient was admitted to the intensive care unit with abdominal pain and septic shock. Computed tomography scan revealed a 10 cm intrahepatic/perigastric abscess in the region where the fiducials had been placed. All resolved with antibiotics and percutaneous drainage. Our institution has performed 43 EUS-FP to date, with only one

reported infectious complication (Case #38). We now administer antibioprophylaxis to all patients undergoing EUS-FP.

The role of prophylactic antibiotics for EUS-FP was unclear.^[3] To the best of our knowledge, only two infectious complications have been reported previously; one cholangitis after EUS-FP of porta hepatis nodes and^[4] one cholangitis after EUS-FP for pancreatic head cancer.^[3] In both cases, it was uncertain if the infection was related to the procedure or to malignant biliary obstruction. Recent studies with EUS-FP did not systematically administer antibioprophylaxis.^[4,5]

In conclusion, postprocedural liver abscess is a possible complication of EUS-FP. Excessive manipulation of the needle, related to the “semi-sterile” back-loading technique, is probably responsible for our reported complication. Therefore, we believe that antibioprophylaxis pre- and post-EUS-FP in these conditions is a reasonable recommendation, and guidelines for prophylaxis should be amended appropriately. EUS-FP infectious risk could likely also be reduced using a needle that allows placement of multiple fiducials, without manual back-loading.

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Conflicts of interest

There are no conflicts of interest.

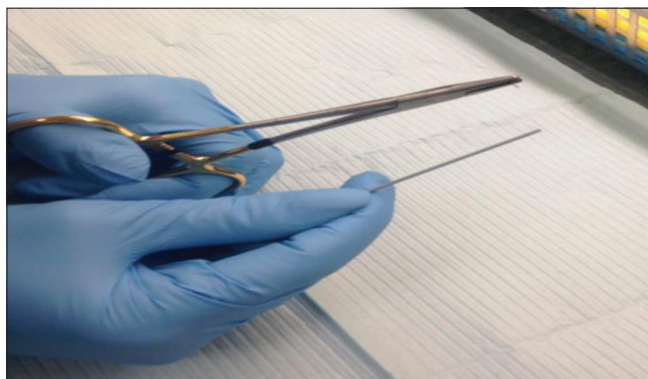


Figure 1. Under sterile conditions, the fiducial is back-loaded into the needle tip

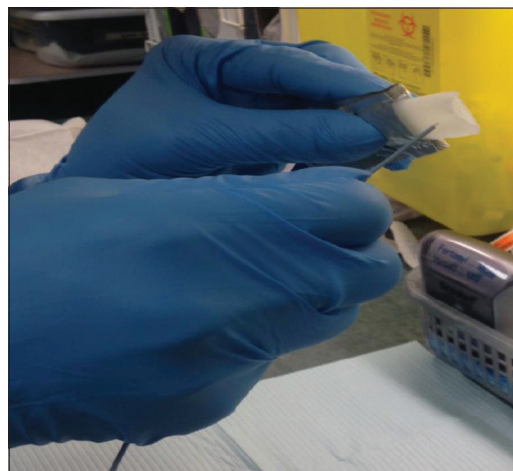


Figure 2. The needle tip is then sealed with sterile bone wax

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