

Dual Benefits: Obtaining Cytology and Core Biopsy with the EchoTip ProCore[®]



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EUS-guided FNA is used to provide specimens for cytology. The diagnostic yield of EUS FNA depends upon the number of needle passes and the presence of an onsite pathologist. The sample adequacy increases by 15 percent when there is an onsite pathologist available. But all EUS FNA facilities do not have an onsite pathologist inside the EUS room to assist in immediate diagnoses. To remedy this situation, societies recommend increasing the number of needle passes to obtain adequate material.

That leads to the question: When do you stop making additional EUS FNA passes and how can you improve the tissue yield in absence of an onsite pathologist? The answer remains a matter for debate.

For the overall diagnosis, obtaining core tissue samples during the EUS FNA session provides an additional advantage over cytology only. Pathologists can then assess the tissue architecture and also perform immunohistochemistry (IHC) to arrive at a complete diagnosis. Making a cell block with repeated passes during standard EUS FNA is the way to obtain core tissue with either 22 or 19 gauge

needle. The 19 gauge EUS FNA or Tru-Cut needles provide good quality tissue cores, but they are cumbersome and pose technical challenges for transduodenal pancreatic FNA.

The new EchoTip ProCore needles from Cook Medical (available in 19, 22 and 25 gauges) provide adequate core tissue using negative suction. The reverse bevel at the side hole located just distal to the needle tip enhances the suctioning of tissue during to-and-fro movement inside the tissue. The aspirate obtained from the EchoTip ProCore needle during EUS FNA can be used for both cytology and core tissue. Our experience at the Asian Institute of Gastroenterology in Hyderabad, India, has shown that the EchoTip ProCore needle is technically safe and provides adequate tissue from pancreatic masses or lymph nodes.



Both the 22 and 25 gauge EchoTip ProCore needles exhibit good maneuverability and endosonographers can comfortably access lesions located in any part of the pancreas, including the transduodenal approach for pancreatic head lesions. The only caveat is that the EchoTip ProCore needle is not as well suited for small (less than 10 mm) lesions or vascular lesions because of the possibility of bleeds. Also, the 19 gauge EchoTip ProCore can be used only for the transgastric or transesophageal approach to obtain core tissue.

To obtain sufficient core tissue requires an average number of 1-2 passes with the 22 gauge EchoTip ProCore, which is significantly less when compared with the standard 22 gauge EUS FNA needles. Hence, EchoTip ProCore gives clinicians the dual benefit of both cytology and core biopsy. This can lead to shorter EUS procedure times, briefer sedation, reduction of accompanying costs and increased patient satisfaction. ■