

Endoscopic ultrasound of the upper gastrointestinal tract. What does the evidence say thirty years later?

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The role of endoscopic ultrasound (EU) in addressing a spectrum of upper gastrointestinal tract diseases and conditions is growing. This is particularly true for tumors, but it is also true for benign pathologies. Two excellent articles in this edition show the application of endoscopic ultrasound to common clinical problems (1, 2). It is interesting to contrast routine clinical indications with the real impact of the technique based on scientific evidence since marked disparities can be found in more than one case. Many of the statements or recommendations by consensus scientific associations have been objects of further analyses in the light of high quality studies, but it is also true that some indications for endoscopic ultrasound in upper gastrointestinal pathologies are still not supported by an adequate level of evidence. An interest in systematically assessing the impact of endoscopic ultrasound for this group of diseases has become evident in the literature in the last decade.

The four best accepted indications for benign pathologies in the upper GI tract are thickening of the gastric wall, lithiasis, chronic pancreatitis, and for distinguishing between extrinsic compression and subepithelial tumors. Conventional endoscopy is limited for confirmation of (or discarding) extrinsic compression as well as for determining its origin. For these purposes endoscopic ultrasound has long been recommended, and this recommendation has gained more support from recent evidence which has high specificity (3). The same comments can also be made regarding thickened gastric folds.

Has endoscopic ultrasound changed management of subepithelial lesions found in upper gastrointestinal endoscopy? The ability of endoscopic ultrasound to determine the source layer is high, but making a specific diagnosis based on sonographic criteria is difficult and is achieved only 46 % of the time (4). The natural history of lesions smaller than 2cms would appear to be benign, but their follow-up intervals are not sufficiently well studied. The yield from determination of histological type by fine needle aspiration under EU varies. With limited evidence, but backed by expert opinion, since fine needle aspiration's success at diagnosis does not improve with Tru-Cut biopsy needles, it is only recommended that unresectable lesions suspected of GIST, metastasis or lymphoma be punctured (5). Recently four papers (5-7) have provided support for since fine needle aspiration the specific diagnosis of subepithelial lesions regardless of the suspected diagnosis (excluding lipomas). These studies show improved diagnostic yields which range from 60% to 85 %. These improvements were obtained through the use of multiple passes or by stimulating the mucosa to reveal the lesion. These results suggest that a specific diagnosis can be reached in most patients with fine needle aspiration that can therefore allow definition of whether to intervene or to monitor.

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