

## **Endosonography-Guided Drainage of Pancreatic Pseudocyst** without Gastric or Duodenal Compression

Endoscopic drainage of pseudocysts that cause indentation of the gastroduodenal wall has been reported by several authors, with promising results (1,2). We report two cases of pseudocyst drainage, guided by endosonography, both without compression of the gastroduodenal wall.

The first patient had a pancreatic pseudocyst diagnosed in the uncinate process  $(7.0 \times 7.1 \text{ cm})$ . The lesion in the second patient was located in the tail of the pancreas (7.0 cm), close to the upper gastric body. Both lesions were treated with the same technique, previously described (3). Puncture was with a 5 Fr needle knife, monitored by EUS in real time (Figure 1). A 0.0035° Teflon-covered guidewire was inserted and a therapeutic duodenoscope introduced over it. Finally a

10 Fr plastic stent was inserted (Figure 2). There were no complications and the pseudocysts had healed after 2 months.

Perforation and bleeding are complications of endoscopic transmural drainage (3,4). When gastroduodenal indentation is not well identified during endoscopy, perforation occurs in up to 10% of cases (4). Orientation on the best puncture site, provided by sectoral EUS, probably decreases the risk of perforation (5), and it becomes essential in the absence of gastroduodenal wall indentation. The use of a guidewire and scope exchange over the wire is still necessary because of the small diameter of the echoendoscope biopsy channel. This report describes a therapeutic alternative for pancreatic pseudocysts, close to the gastroduodenal wall but with-



Figure 1: Echoendoscopy showing a homogeneous lesion, hypoechogenic, located in the uncinate process. The distance between the cyst wall and the duodenal mucosa was 6.4 mm. Notice a 5 Fr catheter located inside the cyst.

out wall indentation, sometimes located in unusual areas, as in our cases. EUS-guided drainage is safe and effective, although skilled physicians are required to perform the procedure. The risk of perforation and





**Figure 2:** Big drainage in Case 2. The plastic stent is located in the upper gastric body.

bleeding is probably smaller than with "blind" endoscopic drainage.

J. C. Ardengh, E. Della Libera, A. P. Ferrari Division of Gastroenterology, Universidade Federal de São Paulo, UNIFESP, São Paulo, Brazil

## References

- Sahel J, Bastid C, Pellat B, Schurgers P, Sarles H. Endoscopic cystoduodenostomy of cysts of chronic calcifying pancreatitis: the report of 20 marries. Pancreas 1987; 2: 447-53.
- Cremer M, Devière J, Engelholm L. Endoscopic management of cysts and pseudocysts in chronic pancreatitis. Gastrointest Endosc 1989; 35: 1–9.
- Kim R, Slivka A. Doppler EUS-guided FNA assists endoscopic management of high risk pseudocysts. Gastrointest Endosc 1997; 45: AB160.
- Grimm H, Binmoeller K, Soehendra N. Endosonography-guided drainage of the pancreatic pseudocyst. Gastrointest Endosc 1992; 38: 170-4.
- Smiths ME, Rauws EAJ, Tytgat GNJ, Huibregtse K. The efficacy of endoscopic treatment of pancreatic pseudocysts. Gastrointest Endosc 1995; 42: 202-7.

Corresponding Author José Celso Ardengh, M.D. Rua Califórnia, 945 apt. 101 04566-061 São Paulo, SP Brazil