

Background and aim

In order to increase the adequacy of pancreatic FNA and to limit the number of needle passes ROSE has been recommended but its additional costs limit its availability. To overcome this problem histological fine needle biopsies (FNB) and the macroscopic on-site evaluation (MOSE) of specimens have been proposed. The aim of the study was to assess the adequacy of FNB coupled with MOSE for solid pancreatic lesions with up to 2 or more than 2 needle passes.

Material and methods

This is a retrospective study in which we analyzed all the MOSE-guided FNB procedures for pancreatic solid lesions effected from 2013 to 2020. Under conscious sedation, the target lesions underwent histological aspiration using one of these needles: Cook Procore 22G, Cook Procore 20G, Boston Scientific Acquire 22G. Needle passes were repeated in the target lesion till the acquired cores overall exceeded 2 cm; then MOSE was considered satisfactory and the procedure ended, regardless of the number of the needle passes.

Results

Overall, 111 patients entered the study; the lesions were located in the tail (11), body (18), neck (10), head (68), uncinata process (4) of the gland; the needle used were Cook Procore 22G (17), Cook Procore 20G (65), Boston Scientific Acquire 22G (29). FNB was adequate in 87 out of 94 cases (92.6%) after ≤ 2 needle passes and in 16 out of 17 cases (94.1%) after > 2 needle passes ($p=0.8$). No statistical difference was shown among the performance of the three needles. Diagnoses were carcinoma (75), metastasis (4), NET (4), benign / inflammatory tissue (20), non diagnostic (8). No adverse events occurred.

Conclusions

The adequacy of EUS-FNB with MOSE for solid pancreatic lesions can exceed 90% even after ≤ 2 needle passes; this strategy could represent a simple and cheap alternative to ROSE.