AB010. S010. Pancreatic cystic lesions' follow-up with abdominal ultrasound scan: could it play an alternative role to the routine use of MRI?

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Background: Pancreatic cystic lesions (PCL) without "worrisome features" (WFs) at the time of diagnosis, usually necessitate a lifetime surveillance. The routine follow-up in these cases comprises a magnetic resonance imaging (MRI) scan every 6 months in the 1st year, then annually for the next 5 years. Since these parameters can also be evaluated with an abdominal ultrasound scan (AUS), we studied the safety, feasibility and economic impact of AUS follow-up, with a delayed use of MRI.

Methods: We retrospectively evaluated all patients who had been followed-up with AUS for the presence of "low risk" PCL. All of patients underwent to an AUS every 6 months for the 1st year and then, in case of stable disease, annually from the 2nd to the 5th year. A surveillance MRI scan was routinely executed every 2 years, or according to the presence of considerable modifications at AUS. We compared the two methods regarding sensitivity and specificity in identifying cysts variations. We also focused on a costs-analysis between the theoretical application of the international guidelines follow-up with MRI, and our follow-up strategy with AUS and delayed MRI.

Results: Two hundred patients were followed-up with AUS between January 2012 and January 2016 for PCL. Mean follow-up period was 25.1±18.2 months. Surgery was required for 2 patients (1%), due to the appearance of WF at imaging [with concordance among ultrasonography (US) and MRI]. During the follow-up, AUS showed "low grade" modifications in 28 patients (14%), comprising main pancreatic duct dilatation <6 mm and increasing of the main cyst of about 0.5 cm, compared to previous examinations. In all of these cases MRI confirmed AUS findings, without adding more prognostic information. In only 11 patients (5.5%) a routine MRI identified an evolution of the lesions, not showed at AUS, but only related to an increased number of the PCL (P=0.14). Nevertheless, a MRI every 6 months would not have changed in any case the decisional process. The mean cost of surveillance for each patient, in a theoretical application of international guidelines with MRI at our group of patients, should have been 402€±273.7€, while according to our follow-up strategy it was 215.4€±212.6€ (P<0.0001).

Conclusions: In patients with PCL without WF, AUS, could be a safe alternative to MRI, reducing the numbers of 2nd level examinations and therefore reducing costs. Long term safety of this approach should be validated on a longer follow-up period, with a larger series of patients and prospective studies.

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