O1203 Is there a parasite in the spleen? Experience in the management of suspect cystic echinococcosis of the spleen from a referral centre

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Background:

Cystic Echinococcosis (CE), a zoonosis caused by E. granulosus, manifests as cysts in any organ. The spleen, is reported to be affected in 15% of cases. Splenic CE should be diagnosed and staged using ultrasound according to the WHO-IWGE expert consensus. Often, however, non-parasitic cystic lesions of the spleen are misdiagnosed as CE. We report our experience in the differential diagnosis of cystic lesions of the spleen in a referral center for the clinical management of CE.

Materials/methods:

We retrospectively reviewed records of patients referred to our center with cystic lesions of the spleen suspect for CE between 01/01/2006 and 27/11/2018. We collected data on medical history, demographics, cyst size classed on the basis of diameter (small ≤50 mm, medium 50-100 mm, large ≥100 mm), serology results (all patients were tested with a combination of VIRCELL Virapid ICT, RIDASCREEN IgG ELISA, Cellognost Echinococcosis IHA, and LDBIO Echinococcosus Western Blot – the presence of at least two positive tests was considered a positive serology) and ultrasound-guided fine needle percutaneous aspiration (FNA).

Results:

Seventy-eight patients and 88 cysts were enrolled. Median cyst number was 1 (range 1-5), mean age was 38.4 years (range 3.7 – 69.4). Eight cysts (9.1%) were large, 32 (36.4%) medium, and 42 (47.7%) small; in 6 cases (6.8%) data on size were unavailable. Nine patients had no serology (11.5%). Four (4.5%) cysts had CE pathognomonic signs on ultrasound: n=1 CE1, n=1 CE2, n=1 CE4, n=1 CE3b. Three CE patients had a positive serology. The seronegative patient carrying a CE1 cyst seroconverted after FNA and protoscolices in the cyst fluid were found, confirming the echinococcal nature of the cyst. All remaining patients were seronegative and cysts had no pathognomonic signs on ultrasound. Nine (10.2%) of these cysts were punctured without finding protoscolices in the cyst fluid.

Conclusions:

In our experience, many splenic lesions suspect for CE lack pathognomonic signs on ultrasound and are negative by serology. Use of the WHO-IWGE classification should be encouraged. In experienced hands, ultrasound-guided FNA of splenic cysts is a safe procedure and allows a definitive diagnosis on the nature of splenic cysts.