Anaphylactic Shock due to Non-Ruptured Hydatid Cyst of Liver

Sir,

A 29-year female patient was brought to the Emergency Department around 6.00 AM. Her Glasgow coma score (GCS) was 9, systolic blood pressure (SBP) 60 mmHg, diastolic blood pressure (DBP) 0 mmHg, pulse 150/min, and O₂ saturation (SpO₂) with fingertip pulse-oximeter was 96 %. Blood sugar measured was 150 mg/dL. The patient was considered in anaphylactic shock. Thus, 2000 cc of 0.9 % NaCl was given as rapid infusion. Adrenalin was administered 0.3 mg subcutaneously and 70 mg prednisolone; and 50 mg ranitidine and 45 mg phenylephrine IV were given intravenously. Brain computed tomography was normal. Hydatid cyst was observed in abdominal ultrasound. The patient responded to medical treatment and SBP increased to 110 mmHg, DBP to 67 mmHg, and pulse rate declined to 105/min. She regained consciousness after approximately 3 hours and GCS improved to 15. We consulted general surgery with preliminary diagnosis of ruptured hydatid cyst. After computed tomography scan of abdomen, ruptured hydatid cyst was excluded. The cyst was located in the right lobe of liver. Echinococcosis specific IgE was 43.8 U/ml (very strong positive; normal range: 0-6.0 U/ml). The patient was admitted to general surgery clinic for 2 days with diagnosis of non-ruptured hydatid cyst. She was then discharged and outpatient treatment was arranged. She was given albendazole 15 mg/Kg/day, divided into 2 doses per day for 3 weeks. Her condition improved with medical treatment and was advised to come for follow-ups. Hydatid cyst wall is made up of two layers, endocyst and exocyst. The protective outer layer comprises of mucopolysaccharide structure and is called exocyst, and the fertile inner layer, where the vesicles and scolices are born is called endocyst. Inside the cyst is a clear, sterile but antigenic liquid called rock water. Anaphylactic shock caused by echinococcus was found to be an IgE-related allergic reaction. Most of the patients had IgE, which is developed against echinococcus granulosus cyclophilin, an allergen reactive with IgE and IgG4 from patients with cystic echinococcosis. Clin Exp Immunol 2002; 128(1):124-30. doi: 10.1046/j.1365-2249.2002.01807.x

In summary, non-ruptured hydatid cyst should be kept in mind in cases of anaphylaxis and anaphylactic shock.

CONFLICT OF INTEREST: The authors declared no conflict of interest.

AUTHORS’ CONTRIBUTION: AA, BSA, KS: Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; drafting the work or revising it critically for important intellectual content; and final approval of the version.

REFERENCES


Akcan Avci¹, Begum Seyda Avci² and Kemal Sener¹

¹Department of Emergency Medicine, Health Science University, Adana City Research and Training Hospital, Adana, Turkey
²Department of Internal Medicine, Health Science University, Adana City Research and Training Hospital, Adana, Turkey

Correspondence to: Dr. Akcan Avci, Department of Emergency Medicine, Health Science University, Adana City Research and Training Hospital, Adana, Turkey
E-mail: drakcanavci@gmail.com

Received: February 19, 2020; Revised: March 15, 2020; Accepted: March 26, 2020
DOI: https://doi.org/10.29271/jcpsp.2021.02.247