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Approach to hydatid cyst rupture patient who administered with anaphylactic shock

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Abstract

Hydatid cyst is a parasitic disease, which can involve liver, lungs, spleen, kidneys, orbita, heart, brain and bones. In case of rupture it can cause anaphylactic reactions, shock and cardiovascular collapse. Cyst hydatid is a very common health problem in our country among 30-50 year-old males therefore it is essential to include it in the differential diagnosis idiopathic anaphylactic shock.

Key words: Hydatid cyst rupture, Anaphylactic shock

Introduction

Hydatid cyst is a parasitic disease, caused by Echinococcus granulosus, which can involve liver (%85-90), lungs (%10-30), spleen (%10), kidneys, orbita, heart, brain and bone and in case of rupture it can cause anaphylactic reactions, shock and cardiovascular collapse (1-6).

Case

In this study we present a 34 year-old male with no known systemic disease who was admitted with loss of consciousness, erythematous rashes, which do not fade with palpation, 70/50 mmHg arterial blood pressure, generalized edema, and no response to pain and no peripheral pulse. Patient had spontaneous eye opening.

He was administered 1mg intravenous adrenalin twice, was oxygenized and given intravenous fluid and admitted to the ICU (Intensive Care Unit) where he was administered intravenous 1.5mg/kg methyl prednisolone and 45.5mg feniramin maleate.

Skin lesions were regressive over the umbilicus and there was generalized distension over the abdomen. White cell count was 27.000/mm3, AST:201 U/L, ALT:237 U/L. After patient became hemodynamically stable ultrasound investigation was made and cystic lesions with septas (78x92mm in the left lobe of the liver and 113x98,2mm in the spleen) were detected.

Immediate surgery was planned. Patient was administered 1 mg/kg lidocain HCL, 2 mg/kg propofol, 0.6 mg/kg esmeron, 1 µcg/kg fentanyl and was intubated. Maintenance of anesthesia during surgery was provided with %2 sevoflurane in %50O₂/50N₂0. Cystectomy was performed in the liver and was irrigated with %3 NaCl. It was detected that the cyst, which involved the entire splenic fossa, was ruptured and splenectomy was performed. At the end of surgery, inhalation anesthetics were terminated. Skin lesions returned to normal, patient opened his eyes spontaneously within 4 minutes and after his respiration became sufficient he was transferred to ICU. In postoperative 36th hour the abnormalities in the hemogram and blood biochemistry recovered and patient was discharged.

Discussion and Conclusion

Spontaneous, intraoperative or posttraumatic rupture of cyst hydatid causes fluid with highly antigenic features to mix into the circulation and cause anaphylactic shock (3-6). Cyst hydatid is a very common health problem in our country among 30-50 year-old males. We are in the opinion that it is important to include hydatid cyst rupture in differential diagnosis of idiopathic anaphylactic shock

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