



Medical Imagery

Fatal Hemoperitoneum after Abdominal Paracentesis

Min-Po Ho^a, Wen-Han Chang^{b-g*}

^a Department of Emergency Medicine, Far Eastern Memorial Hospital, New Taipei City, Taiwan, ^b Department of Emergency Medicine, Mackay Memorial Hospital, Taipei, Taiwan, ^c Department of Medicine, Mackay Medical College, New Taipei City, Taiwan, ^d Mackay Medicine, Nursing and Management College, Taipei, Taiwan, ^e Graduate Institute of Injury Prevention and Control, College of Public Health and Nutrition, Taipei Medical University, Taipei, Taiwan, ^f Institute of Mechatronic Engineering, National Taipei University of Technology, Taipei, Taiwan, ^g Department of Emergency, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan.

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A 68-year-old woman with a history of cirrhosis (Child-Pugh stage C and Model for End-Stage Liver disease score > 40), and ascites came to the emergency department for medical treatment. She complained of distended abdomen full of ascites and requested abdominal paracentesis immediately. Laboratory tests were as follow: aspartate aminotransferase (AST) 116 IU/L, (reference range < 31 IU/L), alanine aminotransferase (ALT) 104 IU/L (< 41 IU/L), total bilirubin 1.3 mg/dL (0.2–1.2 mg/dl), prothrombin time 12.9 sec, serum creatinine 2.78 mg/dL, and platelet 78000 μ /L. During the patient's paracentesis with an 18-gauge needle under ultrasound-guide, the doctor discovered that the patient's abdomen gradually bulged, and at the same time she was unconscious and drowsy with hypotension. After resuscitation of the patient, she was apparently recovered and stabilized, and then a computed tomography of the abdomen was arranged and showed a large hematoma with contrast extravasation in the lower right abdomen (Figure 1, arrows). In the meantime, the physician performed an emergency arterial embolization as soon, there shown a pseudoaneurysm on the right deep circumflex artery branch of the right lower abdominal wall with bleeding actively. Despite of the successful embolization by the radiologist, the patient died for multiple organ failure caused by persistent coagulopathy after the fifth day after surgery.

Today although paracentesis is safe in expert hands, and the risk of bleeding does not exceed 1% in some severe clinical conditions,¹ as it seems in our case. It is crucial to improve the safety margin and reduce the risk of bleeding.² Although not a standard therapy but the use of fresh frozen plasma or platelet concentrate is widely recommended before the procedure in some cases such as the present one.³

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* Corresponding author. Department of Emergency Medicine, MacKay Memorial Hospital, 92, Section 2, Chung-Shan North Road, Taipei, Taiwan.
E-mail address: branden888@gmail.com (W.-H. Chang)

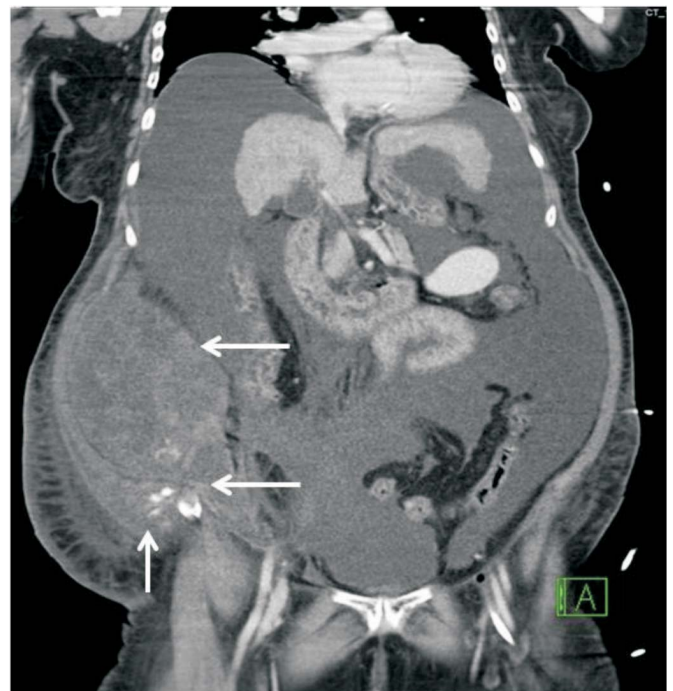


Figure 1. Computed tomography of the abdomen reveals large hematoma in the right inferior lateral abdomen with contrast extravasation (arrows).

References

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