



# Tension Pneumopericardium and Pneumoperitoneum - A Rare Complication of Pericardiocentesis

Gerrit Jansen\*, Linda Irmischer, Rainer Borgstedt and Sebastian Rehberg

Department of Anesthesiology, Intensive Care, Emergency Medicine, Transfusion Medicine and Pain Therapy, Protestant Hospital of the Bethel Foundation, University Hospital OWL, University of Bielefeld, Germany

## Clinical Image

A 79-year-old male patient developed cardiac decompensation due to a tacrolimus-induced hemodynamically relevant pericardial effusion which was relieved by subxiphoid pericardial drainage. Because of clinical deterioration twelve days after pericardiocentesis, computed tomography of the thorax and abdomen was performed. CT scans revealed suspected pneumopericardium<sup>†</sup>, a pronounced ventrally located pneumopericardium with a maximum width of 5.5 cm<sup>†</sup> and consequential compression of cardiac structures<sup>#</sup> and the left upper lobe<sup>†</sup>. In addition, pneumoperitoneum with large amounts of free air along the ventral abdominal wall was obvious<sup>§</sup>. Minithoracotomy showed tension pneumopericardium, laparotomy revealed a small serosal lesion of the small intestine and a perforation of the transversal colon, possibly as a result of the pericardial puncture. A combined pneumopericardium and peritoneum of such extension represents a rare complication of pericardiocentesis (Figure 1). In case of clinical deterioration even with a significant time delay after pericardiocentesis, it is necessary to consider this rare differential diagnosis.

## OPEN ACCESS

### \*Correspondence:

Gerrit Jansen, Department of Anesthesiology, Intensive Care, Emergency Medicine, Transfusion Medicine and Pain Therapy, Protestant Hospital of the Bethel Foundation, University Hospital OWL, University of Bielefeld, Bielefeld, Germany, Tel: 01722047747;

E-mail: gerritjansen@web.de

Received Date: 22 Apr 2021

Accepted Date: 24 May 2021

Published Date: 26 May 2021

### Citation:

Jansen G, Irmischer L, Borgstedt R, Rehberg S. Tension Pneumopericardium and Pneumoperitoneum - A Rare Complication of Pericardiocentesis. *Ann Trauma Acute Care*. 2021; 5(1): 1026.

Copyright © 2021 Gerrit Jansen. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

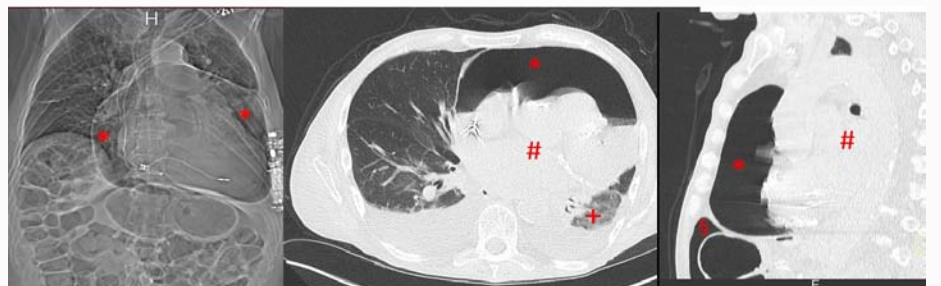


Figure 1: CT scans with suspected pneumopericardium<sup>†</sup>, ventrally located pneumopericardium<sup>†</sup>, displacement and compression of cardiac structures<sup>‡</sup> and the left upper lobe respectively<sup>†</sup> as well as the pneumoperitoneum<sup>§</sup>.