Trendelenburg position associated with a serious complication, a clinical warning

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Internal jugular central venous catheterization (IJCV) is an everyday practice in the Emergency Department and Trendelenburg position is widely recommended to facilitate such a procedure. Reported complications range from 5% to 20% and include pneumothorax, hydrothorax and injuries to major structures. Here we report a 47 year old male patient, known to have chronic bronchitis and alcoholic liver disease, he presented to the emergency department with a circulatory collapse due to an acute pancreatitis. In trendelenberg position, right IJ CVC was inserted under ultrasound guidance. Post procedure chest X-ray showed right upper lobe lung collapse which progressed after 2 hours into a total lung collapse and hypoxia. Endotracheal intubation with mechanical ventilation was required and subsequent computed tomographic Angiography confirmed in place catheter with no extravasation but a large volume pleural effusion associated with complete lung collapse on the right side. Urgent bedside Bronchoscopy, revealed a large mucous plug occluding the right main bronchus with a smaller one at the right upper branching bronchus both were removed immediately. Repeated chest X-ray after 6 hours showed lung expansion with a dramatic decrease of the volume of pleural effusion. Patient was extubated on day three of admission and left the hospital with a full neurological and respiratory recovery on the seventh day. Such a complication was never reported before. We suggest that prolonged trendelenburge positioning in susceptible patients can be associated with significant morbidities including mucus plug and total lung collapse and maybe it is safer to be avoided in patients with reactive airway disease.

Biography

Mohamed Abbasy is currently working as an emergency medicine clinical fellow in Hamad Medical Corporation – Doha – Qatar. He successfully completed the Injury Prevention Research and Training Program held in University of Maryland, School of Medicine, Baltimore, Maryland, USA. He has attended in the R Adams Shock Trauma Center, University of Maryland, School of Medicine, Baltimore, Maryland in 2008. He finished his training in emergency medicine as successfully awarded the fellowship of Egyptian Board of Emergency Medicine in 2009. He has a good experience in working in Gulf region and worked as an assistant Program director of the Saudi Board of Emergency Medicine in Eastern region – KSA in 2013. He successfully passed his membership examination of the Royal College of Emergency Medicine UK in 2014. He is interested in critical care, emergency ultrasound and resuscitation teaching working as instructor of (ACLS- APLS- ATLS- ALS- APLS- STEPs) courses.

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