
Abstract:

BACKGROUND: Pericardial effusion and cardiac tamponade are rare but life-threatening complications of percutaneously inserted central line (PICL) use in extremely low birth weight (ELBW) neonates, with an incidence reported between 0.07% and 2% of PICLs placement. Timely diagnosis and pericardiocentesis has been proven to be life-saving.

CASE PRESENTATION: The patient was a 620 g birth weight neonate who presented with sudden cardiac instability 18 days after the insertion of a PICL and in spite of a presumed satisfactory position of the catheter tip. The transthoracic echocardiography demonstrated severe pericardial effusion with evidence of cardiac tamponade. Successful urgent subxiphoid pericardiocentesis was performed; totally 2 ml of whitish fluid was collected, which resulted consistent to the composition of the hyperosmolar TPN solution infused.

CONCLUSION: Cardiac tamponade should be considered in any newborn with a peripherally inserted central catheter who presents with cardiorespiratory instability (bradycardia, cyanosis and metabolic acidosis), even when lines are believed to be placed correctly.