

To determine the incidence of pericardial effusion with cardiac tamponade in preterm infants in a pediatric intensive care unit, with emphasis on the relationship between pericardial effusion and peripherally inserted central catheter, and to evaluate the role of bedside ultrasound in approaching these cases” Barreiros et al (2018).

Abstract:

OBJECTIVE: to determine the incidence of pericardial effusion with cardiac tamponade in preterm infants in a pediatric intensive care unit, with emphasis on the relationship between pericardial effusion and peripherally inserted central catheter, and to evaluate the role of bedside ultrasound in approaching these cases.

METHODS: we conducted a retrospective analysis of patients admitted to a pediatric intensive care unit between July 2014 and December 2016, who presented pericardial effusion with hemodynamic repercussion, evaluated by ultrasonography.

RESULTS: we studied 426 patients admitted to the five beds of the neonatal unit. In the period, there were 285 bedside ultrasound exams. We found six cases of pericardial effusion, four of which with obstructive shock and need for pericardial drainage. There was no procedure-related mortality, and all patients evolved with hemodynamic improvement after the procedure. The incidence of pericardial effusion was 2.4 cases per year.

CONCLUSION: the incidence of pericardial effusion is low in neonates, but early diagnosis is fundamental due to high morbidity and mortality, especially in cases of abrupt onset. All cases were diagnosed by bedside ultrasonography, demonstrating its importance in the screening of these cases, especially in shocks of uncertain etiology and neonates with sudden onset hemodynamic instability who are using central venous access.

Full Text - English

Full Text - Portuguese

Reference:

Barreiros, L.L., Andrade, F.M., Torres, R.A., Magalhães, L.V.B., Farnetano, B.D.S. and Fiorelli, R.K.A. (2018) Cardiac tamponade by peripherally inserted central catheter in preterm infants: role of bedside ultrasonography and therapeutic approach. *Revista do Colégio Brasileiro de Cirurgiões*. 45(3), p.e1818. .

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