OUTCOME AFTER POSTOPERATIVE CHYLOTHORAX IN PEDIATRIC CARDIAC SURGERY PATIENTS

A LONG-TERM FOLLOW-UP

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Background and Goal of study

- Chylothorax occurs in 1-2% of pediatric cardiac surgery patients
- Associated with prolonged mechanical ventilation and longer hospitalisation times
- High resource utilisation:

- Our goal was the assessment further outcome outcome and its effect on long term mortality and morbidity

Methods

- Prospectively collected data between 2002 – 2012 of the ICU at a tertiary national pediatric cardiac center
- 48 patients presented with chylothorax (1.1%) – 6 excluded
- Propensity matched control group of pediatric cardiac surgery patients
- Study endpoints: reoperations, genetic abnormalities, major long term complications including cerebral lesions, setbacks of neurodevelopment, epilepsy, thromboembolic events, mortality
- End date of follow-up period: November 15th, 2016
- Statistical analysis: McNemar’s test and Kaplan-Meier method

Results

Morbidity:

Variables	Chylothorax n=42	Control n=42	p=
Mortality	10	12	0.89
Follow up (years)	11.6 (9.9 – 13.4)	10.6 (8.7 – 12.5)	0.47
Reoperation	1 (0-2)	0 (0-1)	0.13
Nr. of reoperations (1/2/3/4)	20/9/2/1	17/2/2/2	
Genetic abnormality	11 (26.2%)	7 (16.7%)	0.29
Cerebral	7 (16.7%)	4 (9.5%)	0.37
Epilepsy	1 (2.3%)	3 (7.1%)	0.32
Neurodevelopmental setback	4 (9.5%)	5 (11.9%)	1
Thromboembolic events	5 (11.9%)	3 (7.1%)	0.72
Chylothorax	0	0	1
Phrenic palsy	5 (11.9%)	1 (2.3%)	0.04

Conclusion

Although postoperative chylothorax in pediatric cardiac surgery patients is considered a serious complication, associated with high resource mobilisation and increased load on patients, our data suggests that it doesn’t seem to influence long term outcome and possible recovery.

References

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