

G119(P) PATIENT SAFETY INCIDENT REPORTING DATA TRENDS OF A REGIONAL NEONATAL TRANSFER SERVICE

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Introduction Neonatal transfers take place in a high-risk environment and patient safety must be a key priority.

Methods Risk reporting for this regional transfer service has evolved over the last five years. The patient safety incident form has been adapted over the last 3 years, providing a clear structure of what is to be reported, ensuring the significance of the adverse event is considered and the response to the incident recorded. This study reviewed the patient safety incident forms completed over the last three years.

Results Form completion significantly improved from 61% in 2011 to 96% in 2013. Comparing trends between 2012 and 2013: significant improvements were seen in delayed dispatch to time critical transfers, time delays during stabilisation, equipment problems, vascular incidents and unintended hypothermia. However, a significant increase in hypocarbia and endotracheal tube repositioning. **Conclusion** We report improved risk reporting and an improvement in many of the incident categories. Future work needs to focus on sustaining and improving other categories.

G120(P) FOOD PROTEIN INDUCED ENTEROCOLITIS SYNDROME (FPIES) IS AN IMPORTANT DIFFERENTIAL DIAGNOSIS OF NECROTIZING ENTEROCOLITIS IN PRETERM INFANTS

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Aims GI dysmotility is common in preterm infants. Necrotizing enterocolitis (NEC) may develop when dysmotility, luminal contents and gut bacteria drive inflammation. Breast feeding is notably protective. Food Protein Induced Enterocolitis Syndrome (FPIES) may mimic NEC, including distension and intramural gas. In contrast to NEC, FPIES manifests thrombocytosis and

neutrophilia. We have examined whether cases initially diagnosed as NEC were due to FPIES induced by cow's milk (CM) protein.

Methods 9 preterm infants from one tertiary centre (23–36 weeks, BW 535–1700 g) were identified as possible FPIES because of temporal link between introduction of CM and onset of acute GI symptoms. A timeline was obtained of symptoms, feeding and blood parameters.

Results 3/9 showed gastro-oesophageal reflux ± constipation, improving on breast milk exclusion and worsening on reintroduction. NEC was queried but not diagnosed. All gained weight poorly, leading to CM formula introduction, which substantially worsened symptoms. All settled on exclusion and relapsed on CM challenge, remitting only with hypoallergenic formulae. Investigations showed thrombocytosis (>400) and reduced albumin after CM introduction. 6/9 were diagnosed with NEC, two twice. All showed similar dysmotility and poor weight gain on breast milk, and in all cases NEC symptoms began within 48 h of introduction of CM formula ± fortifier or thickener. In 1/6 thrombocytopenia and neutropenia was consistent with classic NEC, while in 5/6 platelets increased (mean 422, range 310–550) as did wcc (mean 17, range 16–25). All settled only on hydrolysate or amino acid formula.

Conclusion The NEC-like episodes in these infants concord with classic reports of FPIES in LBW infants. Most documented cases of NEC develop thrombocytopenia – indeed thrombocytosis is unreported. All showed dysmotility, poor weight gain and thrombocytosis on breast milk: a pattern characteristic of non-IgE-mediated allergy. CM introduction because of poor weight gain was uniformly deleterious. Recognition that non-IgE-mediated CM allergy may cause dysmotility and impaired growth in preterm infants should promote consideration of maternal milk exclusion diets while breastfeeding, or introduction of hypoallergenic rather than CM formulae. Thrombocytosis in a preterm infant with dysmotility should be a red-flag sign for non-IgE-mediated food allergy and risk of FPIES on formula introduction.

G121(P) SERVICE EVALUATION OF MANAGEMENT OF TERM NEONATES WITH MAJOR PERINATAL BLOOD LOSS

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Abstract G119(P) Table 1

Year	2011	2012	2013	Significance			
Filled Forms /Total Transfers	812/1338	1027/1389	1321/1374	p < 0.001			
Incidents reported	283	471	465				
	No (%forms)	% Transfers	No (%forms)	% Transfers	No (% forms)	% Transfers	Comparing 2012–13
Dispatch >60 min*	18(6.4)	1.3	53(5.2)	3.8	32(2.4)	2.3	p < 0.001
Time Delays	77(27.2)	5.8	163(34.6)	11.7	6(1.3)	0.4	p < 0.001
Vehicle/Equipment Problem	57(20.1)	4.3	53(11.3)	3.8	37(8)	2.7	p = 0.003
Medication Error	4(1.4)	0.3	3(0.6)	0.2	9(1.9)	0.7	p = 0.19
Hypocarbia (pCO ₂ <4kPa)	27(9.5)	2	67(14.2)	4.8	122(26)	8.9	p = 0.017
ET repositioned (<T1 or >T2)	33(11.7)	2.5	50(10.6)	3.6	118(25.4)	8.6	p < 0.001
Vascular access related	29(10.2)	2.2	42(8.9)	3	9(1.9)	0.7	p < 0.001
Loss of ET tube/catheter	6(2.1)	0.4	7(1.5)	0.5	15(3.2)	1.1	p = 0.257
Hypothermia (<36.5) **	53(18.7)	4	121(25.7)	8.7	70(15.1)	5.1	p < 0.001
Communication issues	1(0.4)	0.1	32(6.8)	2.3	52(11.2)	3.8	p = 0.288

*National Time Critical Category **Unintended