

Parenteral Nutrition Audit – Regional

Hospital:	
Age:	
Gender:	

Patient / Admission details

Weight:	In Kilos		Not recorded	<input type="checkbox"/>
Height:	In cm		Not recorded	<input type="checkbox"/>
Date of admission				
Was the admission:	A planned admission	<input type="checkbox"/>	Inter-hospital transfer	<input type="checkbox"/>
	An emergency admission	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Date of referral for PN			Not available	<input type="checkbox"/>
Date of decision to commence of PN				
Date and time infusion commenced				
Was there a delay of more than 24hr between making the decision that the patient required PN and the commencement of PN?			Yes/No	
If 'Yes', please expand on your answer				
Day of week infusion commenced	Weekday	<input type="checkbox"/>	Weekend/Bank holiday	<input type="checkbox"/>

Patient Assessment

Was a nutritional assessment carried out before PN commenced	Yes/No			
If 'Yes', what did the assessment involve (tick all that apply)?	Clinical assessment	<input type="checkbox"/>	Malnutrition screening tool (e.g. MUST)	<input type="checkbox"/>
	Standard electrolytes Magnesium, phosphate	<input type="checkbox"/>	Oral intake	<input type="checkbox"/>
	Anthropometry	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Nutritional Requirements	<input type="checkbox"/>	Risk of re-feeding	<input type="checkbox"/>
Where any electrolyte abnormalities corrected before commencing PN?			Yes/No	
Who made the decision that PN should be commenced	Nurse	<input type="checkbox"/>		

(tick multiple if required)?	Dietician	<input type="checkbox"/>	Grade/Speciality	
	Doctor	<input type="checkbox"/>	Grade/Speciality	
	Unknown	<input type="checkbox"/>		
	Other	<input type="checkbox"/>		
If 'Other', please state				
Were they members of the nutrition team?			Yes/No	
What type of PN was given first?	Multi-chamber bag ('off the shelf')	<input type="checkbox"/>	Bespoke bag specially ordered from manufacturer	<input type="checkbox"/>
	Multi-chamber bag ('off the shelf') with additives	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Bespoke bag (made in hospital pharmacy)	<input type="checkbox"/>	Not documented	<input type="checkbox"/>
Were intravenous vitamins (e.g. pabrinex) given?			Yes/No	
Were the PN prescription requirements documented in the case notes?			Yes/No	
If 'Yes', were these of adequate detail			Yes/No	
Who reviewed the patient during the period they were on PN (tick multiple if required)?	Nurse	<input type="checkbox"/>		
	Doctor	<input type="checkbox"/>	Grade/Speciality	
	Dietician	<input type="checkbox"/>	Grade/Speciality	
	Pharmacist	<input type="checkbox"/>		
	Unknown	<input type="checkbox"/>		
	Other	<input type="checkbox"/>		
If 'Other', please state				
How often was the patient reviewed with respect to PN in the first 2 weeks?	Daily (7 days)	<input type="checkbox"/>	1-2 days/week	<input type="checkbox"/>
	Daily (working week)	<input type="checkbox"/>	<1 day/week	<input type="checkbox"/>
	3-4 days/week	<input type="checkbox"/>	unknown	<input type="checkbox"/>
What was reviewed (tick multiple if required) and how frequently (delete as appropriate)?	Constitution of PN	<input type="checkbox"/>	Daily /weekly	
	Biochemical review	<input type="checkbox"/>	Daily/ weekly	
	Clinical status	<input type="checkbox"/>	Daily /weekly	
	Ongoing need for PN	<input type="checkbox"/>	Daily/ weekly	
	Weight	<input type="checkbox"/>	Daily /weekly	
	Vascular access	<input type="checkbox"/>	Daily/ weekly	
	Anthropometry	<input type="checkbox"/>	Daily/ weekly	

Indication for PN

What was the indication (whether documented or not) Please tick the box which is most appropriate	Congenital anomalies; gut	<input type="checkbox"/>	No access for enteral nutrition	<input type="checkbox"/>
	Congenital anomalies; non gut	<input type="checkbox"/>	Pre-operative nutrition	<input type="checkbox"/>
	Necrotizing enterocolitis	<input type="checkbox"/>	Radiation enteritis	<input type="checkbox"/>
	Non functioning gut	<input type="checkbox"/>	Infection (e.g. C.difficile)	<input type="checkbox"/>
	Perforated / leaking gut	<input type="checkbox"/>	Chemotherapy	<input type="checkbox"/>
	Short bowel	<input type="checkbox"/>	Post-surgical complications	<input type="checkbox"/>
	Dysphagia	<input type="checkbox"/>	Volvulus	<input type="checkbox"/>
	Obstruction	<input type="checkbox"/>	Crohn's disease	<input type="checkbox"/>
	Dysmotility	<input type="checkbox"/>	Cancer	<input type="checkbox"/>
	Fistulae	<input type="checkbox"/>	Post-op ileus	<input type="checkbox"/>
	Malabsorption	<input type="checkbox"/>	Other	<input type="checkbox"/>
If 'Other', please state				
Was an indication for PN recorded in the case notes?			Yes/No	
Was the Nutrition team involved in the decision to commence PN?			Yes/No/Unknown	
If 'No', please expand on your answer				
Was a treatment goal documented?			Yes/No	
If 'Yes', what was this? e.g. optimisation of nutrition pre-surgery				
Was EN given to prior to PN?	Not possible	<input type="checkbox"/>	Trial of EN unsuccessful	<input type="checkbox"/>
	Dual therapy	<input type="checkbox"/>	Not documented	<input type="checkbox"/>

Venous Access / Line Care (where multiple, please use new page for each new line used)

Was the type line used for PN documented in the case notes?			Yes/No	
What type of line used (delete details as appropriate for central line)?	Central line	<input type="checkbox"/>	Tunnelled/Not tunnelled	
			Single/Multilumen	
	Peripherally inserted central line (PICC)	<input type="checkbox"/>		
	Peripherally inserted long line (e.g. Mid-line)	<input type="checkbox"/>		

	Standard Peripheral cannula	<input type="checkbox"/>		
Was the insertion of the feeding line documented in the case notes?		Yes/No		
Was aseptic technique documented?		Yes/No		
Speciality and grade of the operator inserting the line?		Not documented	<input type="checkbox"/>	
Was the position of the tip documented?		Yes/No		
Did the patient develop any line-related complications		Yes/No		
If 'Yes', which complications?	Line misplacement	<input type="checkbox"/>	Line occlusion	<input type="checkbox"/>
	Line site infection	<input type="checkbox"/>	Venous thrombosis	<input type="checkbox"/>
	Suspected systemic line infection*	<input type="checkbox"/>	Line fracture/rupture	<input type="checkbox"/>
	Confirmed systemic line infection *	<input type="checkbox"/>	Pneumothorax	<input type="checkbox"/>
	Phlebitis	<input type="checkbox"/>	Haemathorax	<input type="checkbox"/>
	Accidental removal	<input type="checkbox"/>	TPN extravasation	<input type="checkbox"/>
	Nerve damage	<input type="checkbox"/>	<i>Other</i>	<input type="checkbox"/>
Was PN interrupted by a line complication?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

Metabolic Complications

Did the patient develop any metabolic complications?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If 'Yes', which complications? (Please your hospital's reference range for electrolytes to define abnormal results)	Hypophosphataemia	<input type="checkbox"/>	Hypermagnesaemia	<input type="checkbox"/>
	Hypomagnesaemia	<input type="checkbox"/>	Hyperphosphataemia	<input type="checkbox"/>
	Hypokalaemia	<input type="checkbox"/>	Hyperkalaemia	<input type="checkbox"/>
	Hyponatraemia	<input type="checkbox"/>	Hyperglycaemia	<input type="checkbox"/>
	Hypernatraemia	<input type="checkbox"/>	Abnormal LFTs (but not jaundice)	<input type="checkbox"/>
				Jaundice
If the patient had abnormal LFTs how much glucose cal/kg body weight/day did they receive from PN?				
If the patient had abnormal LFTs how much Fat g/kg body weight/day did they receive from PN?				
In your opinion were any of the complications avoidable?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	N/A	<input type="checkbox"/>
If 'Yes', please expand on your answer				

Were the complications managed appropriately?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
	Unknown	<input type="checkbox"/>	N/A	<input type="checkbox"/>		
If 'No', please expand on your answer						
Were IV fluids given in addition to the PN during the first 2 weeks of PN therapy?	Yes/No/Unknown					
If 'Yes', was this: (tick all that apply)	To correct deficit	<input type="checkbox"/>	Routine maintenance fluid provision	<input type="checkbox"/>		
	To correct ongoing losses	<input type="checkbox"/>	No indication documented	<input type="checkbox"/>		
	Other, please state	<input type="checkbox"/>				
What type of fluid was given?	Saline	<input type="checkbox"/>	Colliod	<input type="checkbox"/>	Hartmanns	<input type="checkbox"/>
What volume of fluid was given?						
Duration of PN (days)						
What was the outcome for this patient at 30 days? (tick all that apply)	Weaned onto oral/enteral feeding	<input type="checkbox"/>	Discharged home	<input type="checkbox"/>		
	Home parenteral nutrition	<input type="checkbox"/>	Died during hospital stay	<input type="checkbox"/>		
	Transferred to other unit	<input type="checkbox"/>				

Comments:

*Suspected line infection: Positive blood cultures and evidence of sepsis (fevers, hypotension etc) with no obvious source other than line.

*Confirmed line infection: A recognised pathogen cultured from one or more blood cultures and the organism cultured from blood is not related to an infection at another site. Or a common commensal (i.e., diphtheroids [*Corynebacterium* spp. not *C. diphtheriae*], *Bacillus* spp. [not *B. anthracis*], *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., and *Micrococcus* spp.) cultured from two or more blood cultures drawn on separate occasions and evidence of sepsis and positive laboratory results are not related to an infection at another site