Directorate of Critical Care, Theatres and Anaesthetics FOR ICU USE ONLY





	Vials containing 500mg powder thiopental sodium for reconstitution.					
INDICATION:	unresponsive to Cerebral electric keep the patient Caution: thiope	o standard meas cal activity and int t at burst suppress ental to burst si a traumatic brain i	sures. Thiopenta racranial pressure sion. uppression and	P) or refractory solved is a gerest a should be monitored by the should be monitored by the should be monitored by the should be should	neral anaesthetic red. The aim is to uld not be used	
DOSE AND ADMINISTRATION:	ICU STANDARD INTRAVENOUS INFUSION This is an unlicensed indication and should be commenced only after authorisation by a critical care consultant. Reconstitute three 500mg vials of thiopental sodium, each with 20ml water for injections, giving 1500mg in 60ml – 25mg/ml Commence the loading regime according to table below: LOADING DOSE					
	Ideal Body			(ml/hr)		
	Ideal Body Weight (kg)		ium infusion rate Hour 2	(ml/hr) Hour 3		
		Thiopental sod	ium infusion rate			
		Thiopental sod Hour 1	ium infusion rate Hour 2	Hour 3		
	Weight (kg)	Thiopental sod Hour 1 (10mg/kg/hr)	ium infusion rate Hour 2 (7mg/kg/hr)	Hour 3 (5mg/kg/hr)		
	Weight (kg) 40kg	Thiopental sod Hour 1 (10mg/kg/hr) 16 ml/hr	ium infusion rate Hour 2 (7mg/kg/hr) 11.2 ml/hr	Hour 3 (5mg/kg/hr) 8.0 ml/hr		
	Weight (kg) 40kg 50kg	Thiopental sod Hour 1 (10mg/kg/hr) 16 ml/hr 20 ml/hr	ium infusion rate Hour 2 (7mg/kg/hr) 11.2 ml/hr 14.0 ml/hr	Hour 3 (5mg/kg/hr) 8.0 ml/hr 10.0 ml/hr		
	Weight (kg) 40kg 50kg 60kg	Thiopental sod Hour 1 (10mg/kg/hr) 16 ml/hr 20 ml/hr 24 ml/hr	ium infusion rate Hour 2 (7mg/kg/hr) 11.2 ml/hr 14.0 ml/hr 16.8 ml/hr	Hour 3 (5mg/kg/hr) 8.0 ml/hr 10.0 ml/hr 12.0ml/hr		
	Weight (kg) 40kg 50kg 60kg 70kg	Thiopental sod Hour 1 (10mg/kg/hr) 16 ml/hr 20 ml/hr 24 ml/hr 28 ml/hr	ium infusion rate	Hour 3 (5mg/kg/hr) 8.0 ml/hr 10.0 ml/hr 12.0ml/hr 14.0ml/hr		

Maintenance infusion rate:

Ideal Body		nl/hr)		
Weight (kg)	4mg/kg/hr	5mg/kg/hr	6mg/kg/hr	7mg/kg/hr
40kg	6.4 ml/hr	8.0 ml/hr	9.6 ml/hr	11.2 ml/hr
50kg	8.0 ml/hr	10.0 ml/hr	12.0 ml/hr	14.0 ml/hr
60kg	9.6 ml/hr	12.0ml/hr	14.4 ml/hr	16.8 ml/hr
70kg	11.2 ml/hr	14.0ml/hr	16.8 ml/hr	19.6 ml/hr
80kg	12.8 ml/hr	16.0ml/hr	19.2 ml/hr	22.4 ml/hr
90kg	14.4 ml/hr	18.0ml/hr	21.6 ml/hr	25.2 ml/hr
100kg	16.0 ml/hr	20.0ml/hr	24.0 ml/hr	28.0 ml/hr

Once the EEG is isoelectric, reduce the infusion rate to the lowest dose that will maintain burst suppression.

Continue thiopental for 24-48 hours to achieve ICP control or burst suppression. If status epilepticus is refractory to treatment with thiopental sodium, then refer to the Critical Care Status Epilepticus guideline for further management.

Infuse thiopental sodium through a dedicated central venous catheter. Do not infuse with other drugs.

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	*Serum potassium concentration may drop during thiopental sodium infusion. However, potassium replacement when infusing thiopental sodium can be dangerous. It can lead to serum potassium rebounding to dangerously high levels on stopping thiopental sodium. Therefore, it is generally unnecessary to replace potassium unless it falls below 3.0mmol/l, or unless the patient is symptomatic of hypokalaemia, e.g. arrhythmias. On ceasing thiopental sodium infusion, check serum potassium levels every 2 hours for the first 24 hours.		
CONCENTRATION:	25mg/ml		
STABILITY:	Physically and chemically stable for 6 hours at room temperature.		
ADDITIONAL	See separate document on "Thiopentone levels" for advice on obtaining and		
INFORMATION:	interpreting levels.		

References:

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