

Pediatric V	enous Thromboemboli	ism (VTE) Prop	hylaxis Guideline	
Patients To Be Screened for Risk	- >/= 12 yrs on admissior	n, upon change	<u>to higher level of care, every 7 days</u>	
	Prophylaxis			
Low Risk	Moderate Risk		High Risk	
Without altered mobility and no additional risk factors	Altered mobility (Braden activity score 1 or 2) AND/OR central venous		Active clot, receiving an anticoagulant, personal history of VTE, stroke, MI,	
	catheter with no additional risk factors			
			catheter with additional risk factors	
	Recommende	d Prophylaxis		
Low Risk	Moderate Risk		High Risk	
Early Ambulation and/or ROM	Early Ambulation and/or ROM		Mobility as tolerated (active or passive)	
	AND		AND	
	Sequential Compression Devices		Sequential Compression Devices	
			AND	
			Hematology Consult	
	Additional VT			
Risk Factors			Thrombophilia	
Acute infection (e.g. bacteremia, meningitis)		Factor V Leid	Factor V Leiden	
Cardiac disease: single ventricle pathology or		Prothombin	Prothombin mutation	
arrythmias				
Estrogen supplementation		Protein C def	Protein C deficiency	
Major surgery (e.g. open abdominal, pelvis, spine)		Protrein S de	Protrein S deficiency	
·····j································			)	
Major trauma (e.g. spine, lower extremities)		Antithrombir	Antithrombin deficiency	
Nephrotic syndrome		Antiphospho	Antiphospholipid antibody positivity	
Obesity (> 90th percentile for age)		Hyperhomocysteinemia		
Systemic inflammation (e.g. lupus, inflammatory bowel		Elevated lipoprotein(a)		
disease)		Elevated Factor VIII		
	tive Contraindications to			
Ongoing and uncontrolled bleedir			5	
Uncorrected coagulopathy incl. bu				
Neurosurgery, serious head traum		al ishcemic strol	ke during prior 7 days.	
Known AVM, aneurynsm, CNS ma	iss, or moyamoya			
Anticoagulated patient Aspirin or other irreversible platele	at inhibitor uso within pro	codina z dove		
Known bleeding disorder/tendenc		cealing / days		
Uncontrolled hypertension	у			
,,,	lute Contraindications to	Pharmacologi	c Prophylaxis	
Perioperative/trauma patient with				
Epidural catheter w/in 24 hours or		,	5	
Invasive surgical procedure during	•			
	ntraindications to Seque	ntial Compressi	on Devices	
Suspected or existing deep vein th	•			
Extremity with IV access	-	-	-	
Skin conditions affecting extremit	y (e.g. dermatitis, burns,	recent skin graft	s, leg wounds)	
Acute fracture				
Unable to achieve correct fit due t	o patient size			
Allergy to garment fabric				
Revised EBM Committee 7-19-17				

Revised EBM Committee 7-19-17

## References

## **Prevention of Venous Thromboembolism**

Brady D, Raingruber B, et al. The Use of Knee-Length versus Thigh-Length Compression Stockings and Sequential Compression Devices. Critical Care Nurse, July-Sep 2007, 30(3), p 255-62.

Branchford BR, Nourani P, et al. Risk Factors for In-Hospital Venous Thromboembolism in Children: a Case-Control Study Employing Diagnostic Validation. Haematologica, 2012; 97(4) p 509-15.,

Carlson DS, Pfadt E. Preventing Deep Vein Thrombosis in Perioperative Patients. OR Nurse, Sep 2012, p 15-20.

Dipaola CA. Preventing Deep Vein Thrombosis: A Perioperative Nursing Imperative. AORN Journal, August 2008, 88(2), p 283-85.

Falck-Yttery, Francis CW, et al. Prevention of VTE in Orthopedic Patients. Antithrombotic Therapy and Prevention of Thrombosis, 9<sup>th</sup> ed: American College of Chest Physicians Evidence-Based Clinical practice Guidelines. CHEST, 141(2), February 2012 Supplement, p 278s-325s.

Goldenberg NA, Bernard TJ. Venous Thromboembolism in Children. Hematology Oncology Clinics of North America , 2010 (24) p 151-66.

Gould MK, Garcia DA, et al. Prevention of VTE in Nonorthopedic Surgical Patients. Antithrombotic Therapy and Prevention of Thrombosis, 9<sup>th</sup> ed: American College of Chest Physicians Evidence-Based Clinical practice Guidelines. CHEST, 141(2), February 2012 Supplement, p227S-277s.

Guyatt GH, Akl EA, et al. Antithrombotic Therapy and Prevention of Thrombosis, 9<sup>th</sup> ed: American College of Chest Physicians Evidence-Based Clinical practice Guidelines. CHEST, 141(2), February 2012 Supplement, p7S-47S.

Hanson SJ, Punzalan RC, et al. Incidence and Risk Factors for venous thromboembolism in Critically III Children After Trauma. Journal of Trauma Injury, Infection, and Critical Care, January 2010, 68(1), p 52-56.

Hilleren-Listrud AE. Graduated compression Stocking and Intermittent Pneumatic Compression Device Length Selection. Clinical Nurse Specialist, 2009 23(1), p 21-24.

Kahn SR, Lim W, et al. Prevention of VTE in Nonsurgical Patients. Antithrombotic Therapy and Prevention of Thrombosis, 9<sup>th</sup> ed: American College of Chest Physicians Evidence-Based Clinical practice Guidelines. CHEST, 141(2), February 2012 Supplement, p195S-226S.

Larkin BG, Mitchell KM. Translating Evidence to Practice for Mechanical Venous Thromboembolism Prophylaxis. AORN Journal, November 2012, 96(5) p 513-27.

Maynard G, Stein J. Preventing Hospital-Acquired Venous Thromboembolism. A Guide for Effective Quality Improvement, 2008. Society of Hospital Medicine, Philadelphia, PA.

Menendez J, et al. Incidence and risk factors of superficial and deep vein thrombosis associated with peripherally inserted central catheters in children. Journal of Thrombosis and Haemostasis, 2016, 14: 1-11.

Perioperative Standards and Recommended Practices, 2013 Edition. Recommended Practices for Prevention of Deep Vein Thrombosis. Association of Perioperative Registered Nurses, Denver, Co.

Prentiss AS. Early Recognition of Pediatric Venous Thromboembolism: A Risk Assessment Tool. American Journal of Critical Care, May 2012, Volume 21, No. 3, p 178-83.

Raffini L, Trimarchi T, et al. Thromboprophylaxis in a Pediatric Hospital: A Patient-Safety and Quality-Improvement Initiative *Pediatrics* 2011;127; e1326.

Sharathkumar AA, Mahajerin, A. Risk-Prediction Tool for Identifying Hospitalized Children with a Predisposition for Development of Venous Thromboembolism: Peds-Clot Clinical Decision Rule. Journal of Thrombosis and Haemostasis, May 2012, 10: 1326-34.

Van Wicklin SA. Implementing AORN Recommended Practices for Prevention of Deep Vein Thrombosis. AORN Journal, November 2011, 94(5), p 443-54.

7-17-17