Appendix 1: Adolescent Risk Assessment for VTE

Royal Hospital for Sick Children, Glasgow.

First Name:
Surname:
Hospital No:
NHS No:
DoB:
Ward: Hospital:

ADOLESCENT RISK ASSESSMENT FOR VENOUS THROMBOEMBOLISM (VTE)

Mobility - all patients - (tick one box)					
Surgical patient and post pubertal or aged >13 years		Non-surgical (Including PICU) patient expected to have ongoing reduced mobility relative to normal state and post pubertal or aged >13 years		Non-Surgical patient aged >13 years not expected to have significant reduced mobility relative to normal state	
Assess for thrombosis and bleeding risk below				**Risk assessment now complete**	

THROMBOSIS RISK			
Patient related	**Tick**	**Admission related**	**Tick**
Central venous line in situ		Severe trauma	
Active cancer or cancer treatment		Major orthopaedic surgery	
Dehydration		Acute surgical admission with inflammatory or intra-abdominal condition	
Known thrombophilia		Total anaesthetic + surgical time >90 minutes	
Obesity (BMI >30, take wt [in kg]/ height [m^2])		Intubated + ventilated	
One or more significant medical co-morbidities (e.g., nephrotic syndrome, sickle cell disease, inflammatory bowel disease, low output cardiac state)		Acute severe sepsis	
Personal history of VTE		Severe burns	
First degree relative with a history of VTE under the age of 40 years			
Use of oestrogen-containing contraceptive therapy			
Pregnancy or < 6 weeks post partum			

BLEEDING RISK			
Patient related	**Tick**	**Admission related**	**Tick**
Active bleeding		Neurosurgery or eye surgery	
Acquired bleeding disorders (such as acute liver failure)		Spinal surgery within previous 24 hours	
Concurrent use of anticoagulants known to increase the risk of bleeding		Other procedure with high bleeding risk	
Acute stroke		Lumbar puncture / epidural / spinal anaesthesia expected within the next 12 hours	
Thrombocytopenia (platelets < 75 x 10^9 / L)		Lumbar puncture / epidural / spinal anaesthesia within the previous 4 hours	
Uncontrolled systolic hypertension		Significant head injury	
Inherited bleeding disorder (such as haemophilia and von Willebrand's disease)			

BASIC RISK ASSESSMENT FOR VENOUS THROMBOEMBOLISM (VTE)

A risk assessment should be conducted for ALL ADOLESCENT OR POSTPUBERTAL PATIENTS on admission to hospital or in preadmission. It is recommended that all patients should be periodically re-assessed during their inpatient stay as risk may change. Re-assessment after at least 48 to 72 hours is recommended.

STEP ONE

- Use a patient specific addressograph to identify the patient you are assessing
- **Assess all patients admitted to hospital for level of mobility *(tick one box)***
- **Review the patient-related factors shown on the assessment sheet for thrombosis risk, ticking each box that applies *(more than one box can be ticked) and* admission-related risk**
- The risk factors identified are not exhaustive. Clinicians may consider additional risks in individual patients and offer thromboprophylaxis as appropriate.

STEP TWO

- **Review the patient-related and admission-related factors shown against bleeding risk and tick each box that applies *(more than one box can be ticked).***

STEP THREE

IN AT-RISK PATIENTS, ALWAYS:-

Consider general measures to reduce the risk of VTE:

- *Maintain adequate hydration*
- *Mobilise early*
- *Remove central venous lines as soon as possible*

Consider specific measures to reduce the risk of VTE:

- *Mechanical prophylaxis, e.g. Graduated compression stockings/TEDs, IPC devices*
- *Thromboprophylaxis with low molecular weight heparin (LMWH)*

The team looking after the patient must bear in mind the following:

- *Although the risk of VTE increases during adolescence compared to younger children, the absolute risk remains low compared to older adults*
- *There is little evidence to support the use of specific measures, including LMWH, to reduce the risk of VTE in this age group*
- *Physical methods to reduce the risk of VTE will only be suitable in older and larger adolescents and should be used according to local protocols and experience*
- ***If an increased risk of bleeding is documented on the risk assessment- thromboprophylaxis with LMWH is relatively contraindicated***
- *The use of LMWH outside of locally agreed specialty group protocols should always be discussed with a haematologist*

OUTCOME	No thromboprophylaxis	Mechanical thromboprophylaxis	LMWH
(please tick any that apply)			

Completed by: …… **Date:** ……

Prescribe the appropriate intervention if required, and complete all the prescription chart documentation. *File this assessment in the patient's medical notes.*