

Increased bleeding tendency

Definition

This is defined as bleeding that is

- spontaneous and/or
- excessive and/or
- delayed in onset following tissue injury.

Causes

Increased bleeding tendency can broadly be considered to be due to one, or both, of the processes outlined below.

1. a localized pathological process
2. a disorder of the hemostatic process. This involves the complex interplay of vascular integrity, platelet number and/or function, coagulation factors and fibrinolysis

This guideline will address disorders of haemostasis.

Disorders in Haemostasis

1. **Vascular integrity & disorders of platelets** – These disorders effect primary haemostasis. They are characteristically associated with mucosal and cutaneous bleeding. Mucosal bleeding may be manifest as epistaxis, gingival bleeding and large bullous haemorrhages. Bleeding into the skin is manifested as petechiae or superficial ecchymoses.
2. **Coagulation disorders** - The typical manifestations of bleeding in the coagulation disorders are large palpable ecchymoses and large, spreading, deep soft tissue hematomas. Haemorrhage into synovial joints (haemarthrosis) most often indicates a severe inherited coagulation disorder, such as haemophilia.
3. **Disorders of fibrinolysis** - Congenital and acquired abnormalities of fibrinolytic system, which are less common, can also be responsible for excessive bleeding (and thrombosis). Examples include hypo or dysfibrinogenemia and disseminated intravascular coagulopathy (DIC). These

disorders are rare aside from DIC, in which case a cause for the DIC should be sought. Discussion of these disorders is beyond the remit of this guideline.

Table 1 Clinical manifestations of Bleeding Disorders

Bleeding Symptoms	Bleeding disorder	
	Vascular integrity/ Platelets	Factor deficiency
General symptoms	mucocutaneous bleeding (oral cavity, nasal, GI, GU)	deep tissues (muscles and joints)
Excess bleeding after minor cuts	yes	occasionally
Petechiae	yes	no
Ecchymoses	can be small or large	Often large, involving soft tissue or subcutaneous
Haemarthrosis, muscle haematomas	no	yes
Surgical bleeding	yes- immediate Extent depends on severity of disorder	yes – immediate and/or delayed (depends on disorder)

Relevant History

Given the variability in patients' perceptions of bleeding, as well as the lack of a uniform clinical measure of bleeding severity, a systematic and precise history is essential for the consideration of a bleeding diathesis. Patients with a suspected bleeding disorder should be questioned about past bleeding problems, a history of iron-responsive anaemia, bleeding outcomes following surgical procedures, tooth extractions and childbirth, history of transfusion, character of menses and dietary

habits. The response to trauma is an excellent screening test. A history of surgical procedures or tooth extractions or significant injury without abnormal bleeding is good evidence against the presence of an inherited hemorrhagic disorder. An inherited disorder is suggested by the onset of bleeding shortly after birth or during childhood and a positive family history with a consistent genetic pattern.

A careful medication history is important, including prescribed medications, over-the-counter medications and herbal products. Examples include platelet dysfunction induced by aspirin and other commonly used anti inflammatory drugs, clodipogrel, ticlopidine, and the ingestion of drugs that may potentiate the anticoagulant effects of warfarin.

Laboratory Tests

- FBC and blood film (for evaluation of platelet number and morphology)
- Clotting screen (PT, APTT, TT)
- Clauss Fibrinogen

If any of above screening test is abnormal, please discuss with a haematologist.

References

Approach to the diagnosis and management of mild bleeding disorders. 2007. Journal of thrombosis and haemostasis. Greaves et al. 5(suppl1) 167-174