

5 signs of bleeding



Easy bruising with indurations



Frequent or prolonged nosebleeds



Heavy menstrual periods



Prolonged bleeding after injury, childbirth and surgery



Prolonged bleeding/mucous membrane bleeding during dental work

« These signs may indicate a coagulation disorder. To investigate further, please turn the page and use the questionnaire.

www.signsofbleeding.com

Brochures on coagulation disorders are also available for other major medical disciplines

Relevant links to more information on von Willebrand disease and other coagulation disorders

www.wfh.org
www.ehaweb.org
www.esh.org
www.hematology.org
www.allaboutbleeding.com

www.nhlbi.nih.gov
www.ehc.eu
www.hemophilia.ca
www.intreavws.com

Address of local haemophilia center:

We would like to thank the international faculty for essential support:

Dr. Andra James (MD)	Debra Pollard (RN)
Dr. Pieter Kamphuisen (MD)	Dr. Kai Leimbach (odont.)
Dr. Johannes Rischewski (MD)	Alexandra Eichert-Naumann
Dr. Elvira Grandone (MD)	Dr. Hubert K. Hartl (MD) [†]

Literature:

- ^[1] Plug I, et al. Bleeding in carriers of hemophilia. *Blood* 2006; 108: 52–56
- ^[2] Minhas HL & Giangrande PLF. Prevention of severe haemophilia – a role for accident and emergency doctors? *Emerg Med J* 2001; 18: 246–249
- ^[3] Abshire TC. Prophylaxis and von Willebrand's disease (vWD). *Thromb Res* 2006; 118: S3–S7
- ^[4] Patti R, et al. Small bowel angiodysplasia associated with von Willebrand's disease: report of a case. *Surg Today* 2006; 36: 659–662
- ^[5] Vincentelli A, et al. Acquired von Willebrand syndrome in aortic stenosis. *N Engl J Med* 2003; 349: 343–349
- ^[6] Kumar S, et al. Acquired von Willebrand's syndrome: a single institution experience. *Am J Hematol* 2003; 72: 243–247
- ^[7] Federici AB, et al. Treatment of acquired von Willebrand syndrome in patients with monoclonal gammopathy of uncertain significance: comparison of three different therapeutic approaches. *Blood* 1998; 92: 2707–2711



5 signs of bleeding

information about coagulation disorders

internists



» Bleeding history

For further investigation, please ask these questions:

Medication and treatment

Are you currently taking or have you recently received

- Antithrombotic medication: aspirin, heparin, clopidogrel, ticlopidine, vitamin-K antagonists (e.g. Marcumar, Warfarin)?
- Non steroidal anti inflammatory drugs: diclofenac, ibuprofen?
- Antibiotic medication: penicillin, tetracycline, sulfonamides, fluoroquinolones (e.g. Ciprofloxacin)?
- Other drugs interacting with the coagulation system: valproic acid, megadoses of vitamin E?

Have you ever had anaemia that required treatment, or have you received a blood transfusion?

Coagulation

Have you ever had a spontaneous nosebleed that either persisted for 10 mins or required medical attention?

Have you ever experienced prolonged bleeding (duration of 15 mins, or spontaneous recurrence within 7 days) from minor wounds?

Women only: Have you ever had heavy menses where you needed to change a pad, or a tampon, more than hourly?

Have you ever experienced heavy, prolonged or recurrent bleeding following a surgical procedure?

Family History

Can you recall any coagulation disorders among family members (these must be blood relatives)?

Do any members of your family (blood relatives) regularly experience any of the '5 signs of bleeding'?

If an answer concerning coagulation or family history is positive, consider referring the patient to a haematologist

Identification of a potential coagulation disorder

- Approximately 1% of the general population have a mutation in the von Willebrand factor (VWF) gene
- Female carriers of haemophilia A & B have an increased risk of bleeding after trauma and medical interventions^[1]
 - The risk of prolonged bleeding (more than 5 mins) from small wounds is increased 2-fold in carriers^[1]
- Most presentations of severe haemophilia are made to emergency departments^[2]

It would be prudent to spend 5 minutes on '5 signs' in any of the following situations – these could all indicate a coagulation disorder

- Marked bruising^[2]
- Acute or chronic joint pain^[3]
- Persistent angiodysplasia^[4]

When discussing bleeding, ask the patient about other symptoms of potential coagulation disorders. It only takes 5 minutes – better safe than sorry!

5 minutes

5 signs

to be safer

Coagulation disorders and the internist

In patients with untreated coagulation disorders

- Procedures, such as endoscopy, can cause prolonged bleeding (especially when biopsies are taken)
 - Minimally invasive techniques can cause haematoma and bleeding

Acquired von Willebrand disease (AVWD)

- AVWD can present with dramatic haemorrhage and gastrointestinal bleeding in patients with angiodysplasia^[5,6]
- Aortic stenosis may cause acquired type II von Willebrand disease, characterised by loss of the largest VWF multimers^[5]
- AVWD can also be caused by a monoclonal gammopathy^[7]

If you suspect a coagulation disorder, please determine the patient's 'bleeding history'