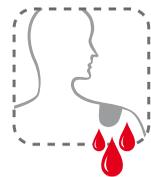


# 5 signs of bleeding



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](http://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](http://www.wfh.org)  
[www.ehaweb.org](http://www.ehaweb.org)  
[www.esh.org](http://www.esh.org)  
[www.hematology.org](http://www.hematology.org)  
[www.allaboutbleeding.com](http://www.allaboutbleeding.com)

[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)  
[www.ehc.eu](http://www.ehc.eu)  
[www.hemophilia.ca](http://www.hemophilia.ca)  
[www.intreavws.com](http://www.intreavws.com)

Address of local haemophilia center:

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

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Dr. Elvira Grandone (MD)	Dr. Hubert K. Hartl (MD) <sup>†</sup>

## Literature:

- <sup>1)</sup> Plug I, et al. Bleeding in carriers of hemophilia. *Blood* 2006; 108: 52–56
- <sup>2)</sup> Ziv O & Ragni MV. Bleeding manifestations in males with von Willebrand disease. *Haemophilia* 2004; 10: 162–168
- <sup>3)</sup> Jones GL, et al. The value of coagulation profiles in epistaxis management. *Int J Clin Pract* 2003; 57: 577–578
- <sup>4)</sup> Pope LER & Hobbs CGL. Epistaxis: an update on current management. *Postgrad Med J* 2005; 81: 309–314
- <sup>5)</sup> Walshe P. The use of fibrin glue to arrest epistaxis in the presence of a coagulopathy. *Laryngoscope* 2002; 112: 1126–1128
- <sup>6)</sup> Alusi GH, et al. Bleeding after tonsillectomy in severe von Willebrand's disease. *J Laryngol Otol* 1995; 109: 437–439
- <sup>7)</sup> Lee CA, et al. The obstetric and gynaecological management of women with inherited bleeding disorders – review with guidelines produced by a taskforce of UK Haemophilia Centre Doctors' Organization. *Haemophilia* 2006; 12: 301–336



# 5 signs of bleeding

information about coagulation disorders

ear, nose and throat

## Coagulation disorders in oto-naso-pharyngology

- Approximately 1% of the general population have a mutation in the von Willebrand factor gene
- Prolonged bleeding after tonsillectomy is nearly twice as likely in female carriers of haemophilia A or B than in non-carriers<sup>[1]</sup>
- Epistaxis is the most common bleeding symptom experienced by patients with von Willebrand disease (VWD)<sup>[2]</sup>
- Epistaxis is often the only indication of an underlying coagulation disorder<sup>[3]</sup>

**It would be prudent to spend 5 minutes on '5 signs' in any of the following situations – either of these could indicate a coagulation disorder<sup>[4]</sup>**

- Prolonged epistaxis (more than 10 mins), especially if trauma and infection can be excluded
- Persistent bleeding after tonsillectomy, particularly if arterial hypertension and local infection can be excluded

**When discussing epistaxis, 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**

## ENT management of patients with coagulation disorders

### In patients with untreated coagulation disorders

- Epistaxis is a potentially life-threatening event
  - If artificial ventilation is required
  - If blood enters the lower respiratory system
- Post-tonsillectomy bleeding requiring treatment is 10 times more likely in carriers of haemophilia A or B than in non-carriers<sup>[1]</sup>

### Management

- Neoplasia should be ruled out as the cause of recurrent epistaxis or tonsil haemorrhaging<sup>[4,6]</sup>
- Before surgery, the activity of the deficient coagulation factor should be measured and adequate levels should be ensured
- After surgery, close follow-up is recommended, to monitor coagulation factor levels, and to assess for delayed bleeding complications<sup>[7]</sup>

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



## » 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**