Chapter 7: **Treatment of Specific Hemorrhages**

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RECOMMENDATIONS

7.2 | Joint hemorrhage

Recommendation 7.2.1

Hemophilia patients with severe hemarthrosis should be treated immediately with intravenous clotting factor concentrate replacement infusion(s) until there is bleed resolution. **CB**

Recommendation 7.2.2

Hemophilia patients with moderate or mild joint bleeding should be given 1 intravenous infusion of clotting factor concentrate, repeated if clinically indicated, depending on the resolution of the bleed. **CB**

Recommendation 7.2.3

In hemophilia patients with hemarthrosis, severity of pain should be graded and monitored according to the World Health Organization (WHO) pain scale. **CB**

Recommendation 7.2.4

Hemophilia patients with pain due to hemarthrosis should be given analgesic medication according to the severity of the pain. **CB**

Recommendation 7.2.5

In hemophilia patients with severe pain, management of such pain should include opioids based on clinical symptoms to an extent that the patient is comfortable to weight bear or use the joint as much as possible without any pain. **CB**

Recommendation 7.2.6

Hemophilia patients with hemarthrosis should be managed using the RICE approach (Rest, Ice, Compression, and Elevation) in addition to clotting factor concentrate replacement.

- REMARK : The WFH recognizes that in some regions of the world, RICE may be the only initial treatment available or the best treatment available in the absence of an adequate supply of CFCs or other hemostatic agents. **CB**

Recommendation 7.2.7

In hemophilia patients with hemarthrosis, weight-bearing should be avoided until the symptoms improve to an extent that the patient is comfortable to weight bear without significant pain. **CB**

Recommendation 7.2.8

In hemophilia patients, use of opioid analgesia in managing pain should be limited in duration, as much as possible. **CB**

Recommendation 7.2.9

In hemophilia patients with hemarthrosis, physical therapy exercises performed under clotting factor coverage should begin as soon as the pain symptoms stop. **CB**

Recommendation 7.2.10

In hemophilia patients with hemarthrosis, the aim of physical therapy should be to return joint function to the pre-bleed state. **CB**

Recommendation 7.2.11

For hemophilia patients without inhibitors on factor replacement therapy presenting with joint hemorrhage and persistent pain, arthrocentesis is recommended only if there is a tense, painful hemarthrosis or suspicion of infection. Routine arthrocentesis is not advised.

- REMARK **:** In many healthcare settings, arthrocentesis is not common practice because of fear of introducing intra-articular infection. **CB**

7.3 | Central nervous system and intracranial hemorrhage

Recommendation 7.3.1

In hemophilia patients presenting with suspected central nervous system bleeds or bleed-related symptoms, clotting factor replacement therapy should be administered immediately before investigations are performed. **CB**

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Recommendation 7.3.2

In patients with hemophilia presenting with suspected central nervous system bleeding that could be life-threatening, clotting factor replacement therapy should be administered immediately before investigations are performed and continued until the bleed resolves.

- REMARK : In patients with hemophilia who have been treated for central nervous system bleeding, secondary prophylaxis is recommended to prevent bleed recurrence. **CB**

7.4 | Throat and neck hemorrhage

Recommendation 7.4.1

In hemophilia patients with throat and neck bleeding, clotting factor replacement therapy should be administered immediately and critical care evaluation sought. **CB**

Recommendation 7.4.2

In hemophilia patients with throat and neck bleeding, including injury of the tongue, clotting factor replacement therapy should continue until the bleeding symptoms have resolved. **CB**

Recommendation 7.4.3

In hemophilia patients with throat and neck bleeding and local infection, antifibrinolytics should be started to treat the bleed and antibiotics to treat the infection. **CB**

7.5 | Gastrointestinal/abdominal hemorrhage

Recommendation 7.5.1

In hemophilia patients with gastrointestinal bleeding, factor levels should be raised immediately and the underlying etiology of the bleed identified and treated. **CB**

Recommendation 7.5.2

Hemophilia patients with gastrointestinal bleeding should be prescribed antifibrinolytics. **CB**

Recommendation 7.5.3

In hemophilia patients with gastrointestinal bleeding, endoscopic and radiologic imaging should be performed to identify all sites of bleeding. **CB**

Recommendation 7.5.4

In hemophilia patients with gastrointestinal bleeding, hemoglobin levels should be monitored regularly. **CB**

7.6 | Renal hemorrhage

Recommendation 7.6.1

For hemophilia patients with urinary tract hemorrhage, the site of bleeding should be identified and clotting factor replacement therapy should be administered immediately. **CB**

Recommendation 7.6.2

Hemophilia patients with renal bleeding should be given adequate hydration and prescribed bed rest until bleeding stops. **CB**

Recommendation 7.6.3

In hemophilia patients with renal bleeding, antifibrinolytics should not be administered. **CB**

Recommendation 7.6.4

In hemophilia patients with renal bleeding, clotting factor replacement therapy should continue until the bleeding is resolved. **CB**

7.7 | Ophthalmic hemorrhage

Recommendation 7.7.1

In hemophilia patients with ophthalmic bleeding, clotting factor levels should be raised immediately and the patient evaluated by an ophthalmologist. **CB**

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Recommendation 7.7.2

In hemophilia patients with ophthalmic bleeding, regular physical examination should be carried out every 6-8 hours for the duration of the ophthalmic bleed.

• REMARK **:** Imaging may be included as clinically indicated. **CB**

Recommendation 7.7.3

In hemophilia patients with ophthalmic bleeding, treatment and monitoring should be continued until the bleeding is resolved. **CB**

7.8 | Oral hemorrhage

Recommendation 7.8.1

In hemophilia patients with oral bleeding, the site of bleeding should be identified and direct pressure and/or sutures applied, if possible. **CB**

Recommendation 7.8.2

In hemophilia patients with oral bleeding, antifibrinolytics should be prescribed and administered at appropriate dosages. **CB**

Recommendation 7.8.3

In hemophilia patients with persistent oral bleeding, clotting factor replacement therapy should be administered along with local measures such as sutures and topical adrenaline application to stop the bleeding. **CB**

7.9 | Epistaxis

Recommendation 7.9.1

In hemophilia patients with epistaxis, the head should be elevated and cold compression applied to the Little ' s area of the nose. **CB**

Recommendation 7.9.2

In hemophilia patients with epistaxis, nasal packing should be avoided as it can cause bleeding when removed. However, in practice, nasal packing is used extensively. **CB**

Recommendation 7.9.3

In hemophilia patients with epistaxis, gauze soaked in an antifibrinolytic agent may be used in addition to clotting factor replacement therapy. **CB**

Recommendation 7.9.4

In hemophilia patients with persistent epistaxis, vital signs and hemoglobin levels should be monitored until the bleeding stops (usually within 24-48 hours). **CB**

Recommendation 7.9.5

In hemophilia patients with recurrent epistaxis, the underlying pathology should be identified immediately and treated. Decongestants and antihistamines should help if bleeding is related to allergy, and antibiotics should be administered if bleeding is related to infection. **CB**

7.9 | Lacerations and abrasions

Recommendation 7.10.1

In hemophilia patients with lacerations and abrasions, clotting factor replacement therapy should be administered and the wound sutured immediately, if appropriate, in consultation with appropriate surgeons. **CB**

CB: Consensus based; CFC, clotting factor concentrate; MRI, Magnetic resonance imaging; CT, computerized tomography.

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