# THE CLASSIFICATION RECOMMENDED BY THE ORTHOPEDIC ADVISORY COMMITTEE OF THE WORLD FEDERATION OF HEMOPHILIA

The clinical evaluation includes patient data, joint evaluation and physical evaluation as detailed below:

#### I. Patient Data

- 1. Age
- 2. Factor deficiency (VIII, IX, etc.)
- 3. Factor level
- 4. Inhibitor (Yes or No)
- 5. Mode of treatment
  - O = No, or minimal transfusion therapy
  - E = Episodic transfusion for most of all bleeding episodes
  - M = Maintenance or prophylactic therapy
  - (H) = Added after E or M indicates that the patient is on a homeself-transfusion program

Example: 16: VIII: <1:NO:E(H)

A 16-year-old patient, factor VIII deficient, with a level of less than 1%. He does not have an inhibitor and treats at home on an episodic basis.

#### II. Joint Evaluation (of the nonbleeding joint)

1. Pain	0-3
2. Bleeding	0-3
3. Physical examination	0-12
4. Radiologic evaluation	0-13

If the limb described requires an aid to ambulation, the following letters should be added at the end of the evaluation:

B = Brace or orthosis

C = Cane

CR = Crutches

WC = Wheelchair

#### **PAIN**

0: No pain

No functional deficit

No analgesic use (except with acute hemarthrosis)

1: Mild pain

Does not interfere with occupation nor with activities of daily living (ADL)

Mar require occasional non-narcotic analgesic

2: Moderate pain

Partial or occasional interference with occupation or ADL

Use of non-narcotic medications

May require occasional narcotics

3: Severe pain

Interferes with occupation or ADL

Requires frequent use of non-narcotic and narcotic medications

## BLEEDING

This is measured by the number of minor and major hemarthroses *per year*.

- 0 = None
- 1 = No major, 1-3 minor
- 2 1-2 major or 4-6 minor
- 3 = 3 or more major or 7 or more minor

## Guidelines

MinorMajorMild painPainMinimal swellingEffusion

Minimal restrictions of motion Limitation of motion

Resolves within 24hrs of treatment Failure to respond within 24hrs

#### PHYSICAL EXAMINATION

This is based on an additive score of 0-12 with 0 being a normal join and 12 being most affected. An (S) is added after the number if a chronic synovitis is clinically diagnosed

Swelling	0  or  2 + (S)
Muscle atrophy	0-1
Axial deformity	0-2
Crepitus on motion	0-1
Range of motion	0-2
Flexion contracture	0 or 2
Instability	0-2

## Guidelines

## Swelling:

- 0 = None
- 2 = Present
- (S) = Added after score if chronic synovitis is present

### Muscle atrophy:

- 0 = None or minimal (<1cm)
- 1 = Present

## Axial deformity (measured only at knee or ankle):

#### Knee

 $0 = Normal = 0.7^{\circ} \text{ valgus}$ 

 $1 = 8-15^{\circ}$  valgus or  $0-5^{\circ}$  varus  $2 = >15^{\circ}$  valgus or  $>5^{\circ}$  varus

#### Ankle

0 = No deformity

 $1 = \text{Up to } 10^{\circ} \text{ valgus or up to } 5^{\circ} \text{ varus}$ 

 $2 = >10^{\circ}$  valgus or  $>5^{\circ}$  varus

## Crepitus on motion:

- 0 = None
- 1 = Present

#### Range of motion:

- 0 = Loss of 10% of total full range of motion (FROM)
- 1 = Loss of 10-33 1/3% of total FROM
- 2 = Loss of > 33 1/3% of total FROM

### Flexion contracture:

Measured only at hip, knee, or ankle

- $0 = <15^{\circ}$  FFC (fixed flexion contracture)
- $2 = 15^{\circ}$  or greater FFC at hip or knee or equines at ankle

#### Instability:

- 0 = None
- 1 = Noted on examination but neither interferes with function nor requires bracing
- 2 = Instability that creates a functional deficit or requires bracing