The role of the physiotherapist in preventing arthropathy

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The most affected joints in haemophilia

- 90% of bleeding episodes affect the musculoskeletal system
- Up to 80% of bleeds occur in ankles, knees and elbows
- 10% are haematomas
- Bleeding episodes often begin by 2 years of age

Image provided by S. Lobet.

The roles of physiotherapist in Hemophilia Treatment Centre

- Hematology department
- Orthopedic department
- Pediatric department
- Physical medicine department

Physiotherapist
The roles of the physiotherapist in the Haemophilia Treatment Centre

- Joint assessment
- Physiotherapy session
- Orthosis prescription
- Education of non-haematological treatment
- Sports advice
- Research
- Link with the local physiotherapist
- Identify candidates for surgery

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Importance of (bi)annual assessment

- Ensure that bleeds have resolved completely
- Assess small changes over time
- Watch for new problems (deformity, loss of range of motion, compensatory movement patterns)
- Explain surgery / conservative treatments in comprehensive terms!
- Opportunity for contact with the local physiotherapist / teacher / coach
- Give advice in sports participation
- ... Call the physiotherapist **before** small problems become big ones!
Treatment of the acute phase

Replacement of clotting factors

Rest (Immobilisation)

Ice?

Compression (except psoas)

Elevation

Treatment of the chronic phase

Images provided by S. Lobet.
Example of a forced dorsiflexion manipulation

Images provided by S. Lobet.
Use of orthopaedic manual therapy in haemophilia care

Elbow extension

Talo-crural dorsiflexion

Elbow flexion

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Joint disease: a major consequence of overweight and obesity in people with haemophilia

1. Obesity and increased weight load may precipitate increased joint bleeds \(^1\)
2. Decrease in the rates of joint bleeds with weight reduction \(^1\)
3. General population: knee osteoarthritis increased 5 x in men with BMI 30–35 Vs BMI < 25 \(^2\)
4. Obesity is also a risk factor for non-bearing joints\(^2\)

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Specific recommendations for paediatric consultations

1. Choose an appropriate sport TOGETHER!
2. Minimise the risk of injury
3. Evaluate the possible consequences of a bleed

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Consumption of clotting factor replacement therapy represented the vast majority of costs (up to 99%)
In Belgium: physiotherapy visits (consultation + transport) = 2.2% of the total direct costs (see table)

In Taiwan: < 0.1% of the total annual medical cost\(^1\)

In the Netherlands: 95% of the total budget = clotting products\(^2\)

Implementation of physiotherapy in haemophilia care in a most optimal way would cost less than 1% of the total budget\(^2\)

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It is important to promote simple and inexpensive conservative treatments. Money can be saved. Adapted footwear.

Images provided by S. Lobet.
The value of physiotherapy: Words of wisdom

“I am weary of ‘prophylaxis’ that consists of concentrate alone”

“I suspect prophylactic physiotherapy would potentiate concentrate prophylaxis, preventing haemorrhages and saving money”

Dr Carol K. Kasper
Creation of the EAHAD Physiotherapy Group

July 2015

February 2017

Images provided by S. Lobet.
2. Establish and maintain a European Physiotherapists Network
EAHAD Physiotherapists Committee
Strategic Goals

1. Determine **current position** of physiotherapy services for PWH

2. Establish and maintain a European Physiotherapists Network

3. Increase **physiotherapists involvement** in EAHAD

4. Produce **evidence-based practice guidelines**

5. Improve **knowledge & training** of haemophilia physiotherapists

6. Facilitate **pan-European physiotherapy-initiated research**