**Staying on your feet**  
*A session for adults of all ages*

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**Bleeding disorders and exercise**

Arthropathy, acute bleeding episodes and reduced activity leads to reduced:

- Proprioceptive balance
- Muscular strength
- Aerobic fitness

Along with

- Increased falls risk
- Reduced bone density

(Forsyth, Quon, & Konkle, 2011)
Appropriate exercise

- Adjust according to the individual
- Some pt’s, particularly older or affected by inhibitors may have high levels of disability (e.g. severe arthritis, weakness, extremely poor balance, wheelchair bound) – extreme low exercise tolerance
- Some younger adults with severe haemophilia can present without any joint or musculoskeletal symptoms at all - can potentially participate in high levels of sport including surfing, league and soccer

Common limitors

- Arthropathy – use mid joint range exercises, lower impact, warm up
- Bleeds - Potential exacerbations of bleeds if exercise is too intense
- Motivation
Maintaining Motivation

- Find appropriate level of exercise for the individual concerned
- Set specific goals – ensure realistic
- Manage exacerbations well – talk to physio or treatment centre
- Pick an exercise regime which is enjoyable. Think of what motivates the individual; social sporting activity, walking a pet etc.

Exercise Ideas

- Hydrotherapy
- Tai Chi
- Wii Fit
- Dance
- Stationary pedals
- Gym based programs
- Community walking programmes
Exercise Ideas
High level

- Swimming
- Hiking
- Rowing
- Paddle boarding
- Pilates
- Surfing
- Cycling

Group programs available at RBWH include:

- Hydrotherapy
- Gym based exercise classes with individualised circuit programs
- Back classes
- Cardiac and Pulmonary rehab
- New: Circuit gym based exercise for younger people with haemophilia
How much is enough?

- Again this varies
- 2 hour rule

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Australian Commission on Safety and Quality in Health Care: Falls guidelines (2009):

- Environment
- Vision (Haran, Cameron, Ivers, et al., 2009)
- Footwear
- Cognition
- Medications
- Osteoporosis
- Continence
- Dizziness, vertigo and syncope
- Balance and mobility limitations
Falls risk: Balance and mobility limitations

- Strength
- Joint range
- Static Balance
- Righting reactions
- Gait pattern
- Mobility aids

(Forsyth, Quon, & Konkle, 2011)

Haemophilia and Falls

- Fifty percent of PWH (mean age 39) reported falls in the past 12 months. Impairment of balance and related measures compared with controls indicated a 35% difference

  (Fearn, Hill, Williams et al., 2010)

- Reduced:
  - Muscular strength
  - Aerobic resistance
  - Proprioception

  (Gomas, Querol, Gallach, González, & Aznar, 2009).
Falls and Exercise

- **Balance impairments**
  - Assess global causes as well as arthropathy and weakness
  - Rehab exercises

- **Exercise**
  - Warm-up & cool-down
  - Careful stretching
  - Low intensity, higher repetitions
  - Lower velocity, limited joint range
  - Proper technique
  - Proprioception

(Blamey, Forsyth, Zourikian, Short, Jankovic, De Klein, & Flannery, 2010)

References


Questions??