Managing persistent pain in PWBD: multidisciplinary management and pharmacotherapy

A/Prof Carolyn A Arnold
Specialist in Pain Medicine & Rehabilitation Medicine
Ron Sawers Haemophilia Centre, Alfred Health, Melbourne VIC
Now that the doctor is here....

“Pharmacotherapy” (medications)
Talking about medications in management of persistent pain
Acute Pain vs. Persistent, Chronic Pain

- Medication management is different
- In haemophilia, bleeding episodes in joints and muscles cause pain—"acute pain"
- Acute pain serves as a warning sign
  - Treat acute pain—analgesics
  - Non medication mx: RICE
  - Rapid bleed control
  - Review preventative management (factor, target joints etc)
  - Recover function ➔ rehabilitation after rest
Medication for acute pain

- Paracetamol
- NSAIDS (e.g. celebrex)- with great caution: approved by haematologist/ with stomach protection/ no renal problems/ not for everyone/ shortest duration
- Strong analgesics including opioids: codeine, tramadol, oxycodone, tapentadol (with care)
- Cease meds once pain resolves
Pain is not always a reliable indicator of acute bleeding in adults wbd

Acute Pain can **merge** into chronic pain
Concerns re Opioids for Chronic Pain

• Extensive use of opioids to manage pain, especially with home management

• Exposure to opioids increases the risk of dependence and adverse events

• Better to use a combination of meds that act at different points of pain pathway
Patient variability in opioid response

Increased sensitivity

Source: Nat Rev Rheumatol © 2010 Nature Publishing Group
Opiates are a Poor Choice for Chronic Pain Management

Unwanted effects include

- addiction
- suppression of the endocrine and immune system → impotence, low testosterone
- tolerance which makes the drugs ineffective
- magnified pain: paradoxical effect, opioid-induced hyperalgesia (OIH)
- opioids promote inactivity, blunting and lack of motivation
- risks of accidental death from overdose causing suppression of the respiratory centres in the brainstem
Chronic Pain in Haemophilia

32 to 50% of people with haemophilia suffer chronic pain, principally from joint arthropathy (Holstein et al, 2012, European study)

Chronic joint pain is

• more common in those with severe haemophilia and those with inhibitors

• more common in those without access to effective prophylactic factor replacement programmes
Medication for chronic pain in PWBD

- Individualized treatment is best
- Paracetamol regular, extended release
- In selected cases and NSAID
- “Adjunct analgesics” such as tricyclics or selective NA reuptake inhibitors (pain specific forms)
- Gabapentinoids – reduce nerve pain or overly sensitized pain
- Opiates rarely and with care, intermediate strength such as tramadol, or extended release forms of buprenorphine (patch), individualized with expert pain advice
Progression of joint disease

Age 10
- Normal joints

Age 20 to 30
- Early evidence of arthropathy

Age 40 plus
- Moderate - severe chronic arthropathy
Chronic or persistent pain in PWBD

- Long lasting pain
- Recurrent/ fluctuating
- Chronic pain is more complicated & associated with changes in neurobiology, psychological impacts, social changes, and if not managed leads to decline in function
CHRONIC PAIN

HISTORY
(eg, injury, trauma, medical conditions)

PATHOLOGY/PHYSIOLOGY
(eg, inflammation, other co-morbidities)

SOCIAL CONTEXT
(eg, loss of work/income, family roles and relationships, cultural or religious issues)

PSYCHOLOGICAL STATES & TRAITS
(eg, anxiety, depression, fear, catastrophising)

COGNITIVE FACTORS
(eg, interpretation of pain, coping style)

BIOMEDICAL

PSYCHOSOCIAL
Pain perception

- Prior experiences
- Attention/expectation
- Mood (anxiety, depression)
- Neurochemical and structural changes
- Genetics

16th Century

Descending, top down modulation
Ascending, bottom up information

Noxious stimulus

21st Century

Sensitization (Peripheral and Central)
Pain Perception varies and can be modified

Pain Perception is influenced by:

- stress/ anxiety
- cultural and social factors
- biological factors
- past experiences
- rewarding nature of analgesics
1 in 2 PWBD have chronic pain

In the overall population
1 in 5 people have chronic pain
Goals

- Control pain
- Improve joint function
- Maintain normal body weight
- Achieve a healthy lifestyle
- Have fun, emotional wellbeing
Avoid traps of chronic pain

- Mood changes: anxiety, anger, depression,
- Excessive medication dependence
- Inactivity
- Social withdrawal
- Loss of meaningful work and recreation
Balanced Activity

Boom Bust

- Need to rest to recover (Bust)
- Have a good day. Eager to be active.
- Pain flare
- Over do it (Boom)
Psychological impacts in PWBD

Forsyth et al 2014 noted that psychological or psychiatric conditions are reported by 47% of PWBD with 29% related to symptoms of Haemophilia

- depression
- anxiety
- anger
- insomnia (poor sleep)
Role of Multidisciplinary Team in Haemophilia Care

Patient

- Haematologist
- Pain Medicine
- Psychology/Social worker
- Physiotherapist
- Parents and Family
- Haemophilia Nurses

Carolyn A Arnold    HFA conference
13/10/2017
What we are learning about management of degenerative joint disease, osteoarthritis (OA)
For knee and hip osteoarthritis: non operative, non drug treatments

All current clinical guidelines recommend:

• aerobic exercise
• resistance exercise
• hydrotherapy and
• weight loss

Hochberg et al (ARA 2012) Arthritis Care & Research 64(4) 465-74
Clinical Review: Management of OA
Kim Bennell BMJ 2012, NH&MRC Centre of Research Excellence, Melbourne)

- Educate patient about benefit of exercise
- Develop exercise and activity plan and vary to maintain enthusiasm
- Graded activity to manage short term exacerbation of pain
- Initiate exercise under professional supervision
Improve physical and emotional health with exercise

- Exercise enhances endorphins (feel good hormones, naturally occurring)
- Exercises enhance cardiovascular function
- Exercise enhances balance (reduces falls risk)
- Exercise helps weight control
In Conclusion

- Chronic pain is common and onset earlier in PWBD
- Optimal pain management is wholistic, includes exercise, weight control, mood optimization and educated patients
- Medication is only a part of management
My patients at the Ron Sawers Haemophilia Centre in Melbourne.

My colleagues – A/Prof. Ann Powell, A/Prof. Huyen Tran
Penny McCarthy & Megan Walsh,
Ms. Abi Polus, Alex Coombs, Alfred Acute Pain Service

Haemophilia Federation of Australia and Programme Organising Committee