Unravelling Vasculitis Related Fatigue

Dr Neil Basu
Senior Lecturer of Rheumatology
Patient Priorities

• Greatest burden of disease
  – Fatigue (62%)
  – General Pain (23%)
  – Renal Failure
  – Oxygen dependency

Patient-reported outcome assessment in vasculitis provides important data and a unique perspective P-XIV-152 (SA) Clin Exp Rheumatology Vol. 25 no.1, 2007(suppl.44)
Definition of important fatigue

• An overwhelming, debilitating, and sustained sense of exhaustion that decreases one's ability to carry out daily activities, including the ability to work effectively and to function at one's usual level in family or social roles
Quality of Life Impact in Vasculitis

Disease factors
- Nervous system involvement
- High Prednisolone dose
- Raised CRP

Socio-demographic
- Old age

Coping strategies
- Denial

Bio-psychosocial
- Pain
- Sleep disturbance

Bio-psychosocial
- Anxiety
- Depression

Disease factors
- Hypoalbuminaemia

Socio-demographic
- Unemployment

Coping strategies
- Self blame
- Substance dependence
- Self distraction
- Behavioural disengagement
- Positive reframing

Physical health status

Mental health status

FATIGUE

Basu, ARD 2013
Work Disability Impact in Vasculitis

Work Disability

- Overweight
- Depression
- Disease Damage
Work Disability Impact in Vasculitis

- Overweight
- Depression
- Disease Damage
- Fatigue
- Work Disability
Why do doctors seem to ignore fatigue?
A potential model of vasculitis fatigue
Fatigue Management Programme

• Interventions
  – Exercise
  – Talking therapies

• Specialists
  – Physiotherapy
  – Psychology
  – Nursing
  – Occupational Therapy

• Delivery
  – Group
  – One on one
Fatigue outcomes

Adapted from Basu 2013
Exercise outcomes

No. Repitions in 1 min

Days

Steps
Knee bends
Corridor walk
Marching
Sit/Stand
Wall slides
Patient feedback

• ‘I can’t believe what I am able to do now’
• ‘My colleagues at work assume my steroids have been increased!’
• ‘I feel more optimistic about the future now’
• ‘I feel exhilarated’
• ‘A major turn around I never thought would be possible’
What is going wrong in the body to cause fatigue?

Central Mechanisms

Peripheral Mechanisms
Vasculitis fatigue: role of the brain
Are there any obvious differences?
Are there any subtle differences?

Basu et al, Rheumatology (2014)
Fatiguing task
Are there blood flow differences in the brain in response to the fatiguing task?

Basu et al, Rheumatology (2014)
What is the potential?

- Targets for new treatments
- Objective measure of fatigue
- Personalised medicine
Future

- Immune modifiers
- Exercise
- Psychotrophic agents
- Behavioural interventions
- Other pharmacological
  - Novel
  - Hormonal
  - Nutrients
- Other non-pharmacological
  - Social support
  - Pacing
  - Education