Therapy Management of Paediatric Chronic Pain

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Aims of the session

- Understand the role of Physiotherapy and Occupational Therapy in Chronic pain
- To understand what we do and how we manage these patients
- Review of the Therapy evidence to date
Definition of chronic pain

**Pain** is an emotion experienced in the brain, it is not like touch, taste, sight, smell or hearing. It is categorised into Acute pain and Chronic pain.

**Chronic pain** is continuous, long-term pain of more than 12 weeks or after the time that healing would have been thought to have occurred in pain after trauma or surgery.

*Pain can be perceived as a warning of potential damage, but can also be present when no actual harm is being done to the body.*

http://www.britishpainsociety.org
Chronic Pain

- Reflex Sympathetic Dystrophy (RSD)
- Algodystrophy (RSD)
- Sudek’s Atrophy (RSD)
- Complex Regional Pain Syndrome (CRPS)
- Localised pain amplification syndrome
- Fibromyalgia
- Chronic fatigue syndrome
- M.E.
- Musculoskeletal pain associated spectrum of disease
Typical Presentation of Symptoms to Therapy Team

- **Pain**
  - Severe, burning, needles
  - Pain score is subjective
  - Pain anywhere and everywhere!

- **Tenderness**
  - Allodynia
  - Anticipatory

- **Sympathetic changes**
  - Colour change (pale, blue or red)
  - Sweaty
  - Cold (occasionally warmer)
  - Hair growth
Typical Presentation of Symptoms to Therapy Team

- Fatigue
- Sleep disturbances
- Joint swelling
- Inability to perform ADL’s
- Poor school attendance
- Contradictions
Clinical Profile of Adolescent Chronic Pain Patients

- Predominantly Adolescent females
- Pain lasting one year +
- Pain accompanied by clinically significant anxiety and depression
- Significant % had non-intact biological family unit
- Not attending school full-time or being home schooled
- Had seen more than one other specialist for chronic pain condition

Vetter 2008
Other features we find:

- Preceding injury or immobilisation
- Preceding emotional trauma
- 9 years onwards—teenagers
- High achievers – sport, music, academic
- Co-dependent ‘strange’ relationship with parent
- Lack of relationship with father
- Mothers return to work
- Psychopathology
- Secondary gain
The Adolescent with Chronic Pain

Eccleston and Eccleston 2004

- Independence
- Learning history
- Complaining
Common patient journey

- Investigate, investigate and investigate
- Painkillers, painkillers and more painkillers
- Add some “nerve blockers”
- Try some physiotherapy..... Then try some more!
- Refer to somebody else maybe Occupational Therapy
  - Eventually psychology mentioned.
Case Study

- 14 year old Girl
- Was competitive swimmer and wanted to return to this
- Did enjoy dancing and netball
- Swimming injury and went to A/E and admitted for further investigation

On presentation:
- 8 month history of right leg pain – ankle, foot, knee and hip
- Skin changes and Allodynia up to mid shin from her foot
- Pain constant- Score 10/10
- Non weight bearing on crutches and using a wheelchair
- Disturbed sleep pattern
- Non attendance at school for 6 months
- Previously a high achiever academically at school
- Bullied by peers due to involvement in activities and academically achieving high grades
- Parents separated and estranged relationship with father
- Reluctant to be away from her mother for any time
- Had drug management with little effect on pain
MDT Assessment

Most importantly “Listen and Believe”

- Symptoms/Pain/Stiffness
  - When, where, what

- The impact the “problem” has on the young persons life
  - Home, School, Hobbies, Relationships, Mood

- The impact the “problem” has on family life
  - Home, Hobbies, Relationships, Mood
During Assessment What we are looking for....

- THEIR understanding of diagnosis and acceptance
- Parent/child interaction
- Level of dysfunction
- Social environment
- Triggers
- Secondary gains
- Barriers to therapy
- Presence of psychopathology – CAMHS
- Degree of pain behaviour
Explanation

- Explain pain pathway and physiology: hurt ≠ harm
- Diagnosis – positive event
- Explain vicious spiral…..Pain
- Initial onset is different to the maintaining factors e.g. Snowball!
- Explain that we see this condition frequently as a team, we have experience in managing this
- Introduce the concept of self management tools
The Persistent Pain Cycle

Initial onset is different to the maintaining factors
OT Assessment

- Impact of pain on daily life
- Adaptations/adjustments
- Endurance
- Management strategies
  - School/College & community activities
- Volitional level (motivation for occupation)
- Patient/parental
  - concern
  - expectation of intervention
Physiotherapy Assessment

- Appearance of skin/temperature of limb/pulses
- Presence and extent Allodynia (sensitivity to touch)
- Adaptive posturing/gait/behaviour
- Joint range of movement
- Muscle length
- Muscle strength
- Function
Patients will present with an energy rich gait pattern that will make you think ‘how is that possible?’
Successful management

Result of the assessment should be....

- Family and child feel believed
- Family and child understand the condition
  - both physical and the psychological impact
- Family and child understand the treatment
- Family and child ACTIVELY PARTICIPATE with the therapies
- Gain TRUST in the team
Understanding and acceptance of the diagnosis

THE MOST IMPORTANT BIT!!!!

- It is vital that the parents and patient fully understand and believe the diagnosis
Desensitisation

- Desensitisation was started early and an explanation of how it works given
- Advised on regaining normal active movement
- Advised 2 hourly Massage and gentle touch to foot and calf
- Used reassuring language
- Got her to touch it first
  - Firm Hand
  - Gentle hand
  - Textures
    - Smooth
    - Rough
    - Hard
    - soft etc
- Then encouraged parent to touch it
- Therapist to apply textures to area
- Was given as the first homework with this patient's CRPS

This is good to test the patients motivation and commitment to therapy
Patients see very quick results
It works every time if done properly!
In patient rehabilitation

- 2 weeks in patient stay
- Weekend leave
- Sessions with Physiotherapy, OT, Psychology
- Aquatic therapy
- Medical management, Rheumatology/Pain team
Physiotherapy

- Static & dynamic balance
- Muscle stretching
- Muscle strength
- Fitness and stamina
- Gait re-education
- AROM

Physoiotherapy treatment aims to improve confidence, muscle strength, balance, and other factors.
Successful Management........

- **Patient and family ‘readiness for change’** this must be established before entering into a therapy programme.
Readiness for change model

- **Pre-contemplation stage**
  - Denial, still searching for diagnosis, feeling of no control
  - Not considering change

- **Contemplation stage**
  - Barriers to change ‘weighing it up’

- **Preparation to change**
  - Experiment with small changes in behaviour

- **Action stage**
  - Desire for change and taking a definitive action to change

- **Maintenance and relapse**
  - Maintains for long haul
  - Talking through relapse and normalise, avoid catastrophising
OT Management

OT treatment

- Sleep management
- School
- ADL’s
- Grading and pacing activities
- Relaxation
- Desensitisation
- Self-esteem and confidence building
- Routine, balance & baselining
- Upper limb/hand function
ITS NOT WHAT YOU DO IT’S THE WAY THAT YOU DO IT . . . . . . . . . .
AND THAT’S WHAT GETS RESULTS!!
Therapy Outcome From Rehab Admission

- Mobility on discharge
- ROM and Gait
- Stairs
- Sleep
- School Re-integration
- Allodynia
What the Evidence reports:

- Sherry et al (1999)
- Lee (2002)
- Bialocerkowski et al (2012)