Aches and pains – managing the child who presents frequently with somatic symptoms

Louise Webster
Child and Adolescent Psychiatrist
Starship Childrens Hospital and University of Auckland
GP CME 2009
David aged 11 years presents with abdo pain and fatigue

- 12 month history of intermittent central abdominal pain, viral infections
- Missing school or spending day in sick-bay
- Academically able, in accelerate class at school, but worried about how he will catch up now that he has missed so much class
- Gets in trouble at school for talking, few friends
• Duodenal atresia at birth, prolonged hospitalisations, colostomy reversed 18/12
• Perceived by mother as ‘sickly’
• Abdominal pain started 1 year ago
• Surgical review – Pseudo-cyst of spleen
• While awaiting surgery ‘could burst’
• Splenectomy 8/12 ago – pain and fatigue continued
On examination

- Healthy looking 11 year old boy
- Anxious about possible abdominal pathology and that ‘something else might go wrong’
- Very fidgety during interview, short attention span
- His weight, bowel habit, abdominal examination, FBC and ESR are normal
Peter aged 11 presents with low mood, weight loss, and abdo pain

- Lives with father in disadvantaged conditions. No contact with mother.
- Close family friend committed suicide 3 months ago
- Father low in mood, poor physical health and chest-pain
- Peter worries++ about his father and neither has been eating well (quantity or quality)
On examination

- Peter seems very low in mood, withdrawn, flat affect, and is worried about his father
- Peter has lost 10kg and has a mild Fe def. anaemia, but the rest of the physical exam is normal
Hilda aged 11 years

- Several presentations to Emergency Dept with abdominal pain, nausea, and fatigue
- Previous episode recurrent abdominal pain aged 8 years – settled after 4 months
- This episode followed severe ‘gastrointestinal flu-like illness’ 5 months previously
• Lives with mother and older sibling
• Bullied by classmate previous year – shifted to new school, good friends
• Has attended little school for past term due to fatigue
• Witness as pre-schooler to terrifying domestic violence. Court ordered access only ceased 18 months previously
• Mother – perforated retro-caecal appendix, peritonitis aged 10 years
On Examination

• Pale, silent and uncommunicative, reluctant to talk about past experiences.
• Denies current worries or concerns other than fatigue
• On specific questioning acknowledges flash-backs of early traumatic experiences
• General physical examination, abdominal examination, FBC unremarkable. Has lost 5kg.
Alice aged 9 presents with lack of energy and headaches

- Her mother is dying with an inoperable brain tumour, and is being nursed at home
- Alice and her father are very sad, and Alice is not coping as well at school, does not join in with friends at lunchtime
- Alice’s father thinks Alice’s headaches are due to the stress and grief that the whole family is experiencing
Who has what?

• David
  – Somatoform disorder, mild anxiety, probable ADHD

• Peter
  – Crohns Disease, adjustment disorder

• Hilda
  – Somatoform disorder (Chronic fatigue), PTSD

• Alice
  – A.L.L. and normal childhood grief
Community studies of somatic symptoms in children/adolescents

- Campo and Fritsch 1994 (review)
- Frequent headaches: 10-30%
- Recurrent abdominal pain: 10-25%
- Limb pain: 5-20%
- Fatigue: 15% daily
- Pseudo-neurological symptoms rare
Continuum

• Everyday aches and pains

• ‘functional symptoms or MUPS’

• Somatoform disorders
Children who frequently complain of aches and pains -

- have more psychosocial problems
- miss more school
- do worse academically
- use higher levels of ambulatory healthcare
- have higher levels of internalising sx
- are perceived as being less healthy by parents

(Campo et al 2002)
Recurrent abdominal pain - RAP

- 10 - 30% children
- 3 or more episodes affecting activities over 3+ months
- may lead to significant functional impairment
- follow-up shows persisting RAP, functional disability, and increased healthcare use
Evidence of psychological factors

- Onset after specific trauma or stress
- Disability or handicap out of proportion to reported pain
- Clear secondary gain from the pain
- Exacerbations predictably linked to stressful events

(Fritz et al 1997)
In children and adolescents we see:-

- Medically unexplained physical symptoms or ‘MUPS’
- Pain disorders/syndromes
  - complex regional pain, RAP, fibromyalgia, irritable bowel, chronic headache
- Undifferentiated somatoform
  - Chronic fatigue syndrome (CFS)
- Conversion disorder
  - pseudoseizures
Psychological models for recurrent pain

• Family health beliefs: pain = serious disease
  – significant family history of illness
    • pain disorder, somatisation, serious illness
  – Child perceived as vulnerable history of previous illness or life threat
  – Modelling/social learning
Psychological models for recurrent pain

• Secondary gain leads to perpetuation of symptom – ‘operant conditioning’
  – Avoidance of stressful situations (school, bullying, achievement pressure)
  – nurturance and ‘specialness’
Psychological models for recurrent pain

• Somatosensory amplification – ‘classical conditioning’
  – normal bodily sensations misinterpreted by anxious child, become a trigger for pain

• Somatisation as an unconscious psychological defence

• Family systems theory
The child

• Pre-existing vulnerabilities
  – previous illness
  – temperament
  – social competence

• Co-morbid psychiatric disorder
  – anxiety/depression in 1/3
The child cont.

• Extremely high achieving
  – perfectionistic, overcompliant
  – high achieving
  – afraid of failure

• Precipitating minor injury or illness
  – viral illness
  – strain or sprain
Psychosocial Stressors

- No convincing evidence of increased stressor levels in children with recurrent abdominal pain (Walker, Green 1991), but -
  - Chronic pain is a potent stressor in itself
  - Families may deny the importance of existing stressors
Potential stressors

• Within the family
  – Death /illness in family member
  – marital disharmony
  – financial/job difficulties
  – abuse and neglect
Potential stressors

• Peer Group
  – social isolation
  – teasing and bullying

• Academic
  – pressure to achieve
  – transition to secondary education
  – learning disability
  – areas of excellence
Good history of:-

• Presenting complaint
• past medical history
• developmental history
• child’s temperament and emotional/behavioural state
• child’s functioning in school, peer, family
• abuse neglect
• family stressors, medical and psychiatric hx
• current level of function and disability
Depression

• Persistent sad or irritable mood
• Loss of interest or enjoyment in activities
  – Difficulty sleeping or oversleeping
  – Substantial change in appetite or body wt.
  – Difficulty concentrating
  – Loss of energy
  – Psychomotor agitation or retardation
  – Feeling worthless or inappropriate guilt
  – Recurrent thoughts of suicide or death
In depressed children and adolescents

- **Irritability** often more prominent
- Symptoms more **unstable** – may have a ‘good’ day, or retain some isolated interest
- **Somatic symptoms** prominent in children and in those with co-morbid anxiety as well as depression
- **Hopelessness** an important prognostic sign for suicidal ideation and attempts
Anxiety Disorders

• **Separation anxiety** - developmentally inappropriate and excessive anxiety concerning separation from parents and home
  – Fears of things that could threaten integrity of family
  – School Refusal common
  – Often demanding, intrusive and in need of constant attention, especially when anxious
  – **Often have somatic complaints especially on school days or when facing separation eg bed-time**
• **Panic disorder**
  – Less common in children, see more in adolescents
  – Symptoms similar to adults, somatic

• **Generalised anxiety**
  – ‘worry-worts’ worry about everything eg volcanoes, tidal waves, pandemics, family finances, school tests, birthday parties etc
A thorough physical examination

• Investigations as indicated by
  – Age and stage
  – Symptom profile
  – Physical findings
Assessment is part of management in medically unexplained symptoms

• Alliance building from the start
  – Eliciting and respecting child’s and family’s concerns

• Avoiding either/or approach in history and investigation
  – acknowledging the importance of both physical and psychological factors
Approach to child and family - psycho-education

- Epidemiology of recurrent pain in children
- Education about pain and physiological factors
  - acute injury response vs.
  - chronic pain response – pain switch stuck on ‘on position’
  - Close relationship between stress/worries and physical effects on the body eg HR + BP
  - effects of immobility, poor sleep, reduced food
Approach to child and family - presenting findings

- **Reassurance** that examination/investigations show no evidence of serious or nasty pathology eg tumour, infection, fracture.
- Use knowledge elicited in history to address particular concerns
- **Avoid** using terms like ‘not real’ or ‘psychological pain’ or ‘all in his head’ or ‘get thee to a shrink’
Approach to child and family - presenting findings

- Reassure the child and family that the pain/symptoms are genuinely felt, and that you will be working with them to improve symptoms etc.
- MUPS (pain, nausea, fatigue etc) usually a complex interaction of physical, social and emotional factors.
- Acknowledgement of the strengths of child and family, efforts to date to resolve pain.
Approach to child and family - presenting management

• Optimum treatment is symptom management and rehabilitation

• Will take time and consistent effort
  – no instant cure/disappearance of symptom
  – learning to manage and live with symptoms in order to return to enjoyable and important activities

• Importance of teamwork - child, family, health team, school
Treatment planning

• Baseline information maybe useful
  – keeping a daily diary of symptom frequency and severity
  – activities, social contacts, sleep
  – school attendance

• Goal setting for child and for family
  – realistic, small graduated steps

• Expect minor ‘hiccups’ or setbacks
Combined psychosocial approach

- Combined psychological and physical therapies
- Rehabilitation focused on
  - increasing independent function
  - increasing adaptive problem solving skills
  - addressing any specific problems
  - normalising activities
This might involve:–

• Pain behaviour regulation
• Pain perception regulation
• Physical therapy
• Treatment of anxiety or depression
• Wider educational or social environment management
• Pharmacotherapy
Pain/symptom behaviour regulation

• Aimed at decreasing ‘pain’ behaviours and increasing ‘well’ behaviours

• Use extinction - ignoring of complaining, wincing, crying (reduce secondary gain for symptoms)

• Use positive reinforcement of well behaviours - praise, positive attention, puppies, outings
Gradual normalisation of child’s program

- Encouraging the child to take more responsibility for symptom management
- Normal household rules
  - eg no daytime TV watching, doing share of chores, normal bed-times
- Parental limit setting re unacceptable behaviour
  - Tantrums, rudeness to siblings
- Negotiating realistic goal setting
  - eg 2 hours at school each morning
To do this you need -

• Parents to be actively accepting of rehabilitative focus
• Focus on observable behaviour rather than subjective reports of pain level
Parents may need help with

• Assessing when a symptom is serious enough to stay home from school
  – Eg no fever and no vomiting
• Quick check by the practice nurse then off to school
• Brokering an agreement with the school
  – Eg that the child stay at school even if complaining of symptom
Pain perception regulation

• Cognitive behavioural strategies
  – giving child a routine for modifying subjective pain/symptom experience
• distraction
• relaxation and breathing
• guided imagery
• self-hypnosis
• biofeedback
Cognitive behavioural strategies

- Effective in children with anxiety, pain syndromes, adolescent depression
- Requires active engagement of the young person
- With children adapt the CBT strategies by ‘externalising’ the problem, and using engaging imagery.
Cognitive behavioural therapy

• Most programmes include
  – ‘cognitive restructuring’ recognising habitual negative interpretations and replacing them with positive
  – ‘activity scheduling’ doing enjoyable things to improve mood
  – problem solving
  – relaxation training
  – conflict resolution
CBT continued

• with pain this might involve
  – Teaching relaxation/distraction
  – Positive self statements about pain recovery
  – Scheduling in increasing activity levels and pleasurable things

• with anxiety this might involve
  – modelling overcoming fears – books, videos, friends
  – teach relaxation, controlled breathing
  – hierarchy of feared situations eg own bed at night
  – exposure using imagination then actually doing it
A quick relaxation exercise

• Loosen your clothes and get comfortable
• Tighten the muscles in your toes and hold for a count of 10. Relax and enjoy the feeling of release from tension.
• Start with toes and move up through the other muscles in thighs, hands, shoulders, eyes, and jaw. Tighten then relax each group of muscles
A quick relaxation exercise

• Feel the tension flowing out of your body as you move up your body
• Focus on slow gentle breathing using your diaphragm (tummy breathing). Breathe in for 3 seconds, out for 3 seconds. Say the word ‘relax’ to yourself as you breathe out.
• Imagine yourself somewhere peaceful and relaxing.
Relaxation for kids
‘tummy breathing’

• Imagine you have a balloon in your tummy
• Put your hand on top of your tummy
• Breathe in slowly through your nose, counting to 3 and feeling the balloon fill with air
• Breathe out slowly through your mouth, counting to 5 and feeling the balloon go flat. Imagine that the pain/worry goes out of your body as you breathe out.
• Notice how your muscles relax as you breathe out. Imagine a picture of your muscles relaxing.
Problem solving (RIBEYE)

• **Relax** first!....breathing
• **Identify** a problem or difficulty and describe what happens around it
• **Brainstorm** - think/write down of all possible solutions (including the crazy ones!).
• **Evaluate** - write down the pros and cons of each solution
• **Yes** - select the one that seems the best and trial it
• **Evaluate** - choose another if necessary
Problem solving

• Important always to set a time to review how this strategy is working
• Trial another solution if the first one was not successful
Sleep problems

• Establishing a sleep routine
  – maybe gradual process

• avoiding activating activities at bedtime
  – eg texting, internet, computer games

• relaxing routines to assist sleep
  – relaxation exercises, guided imagery, quiet music

• reducing daytime sleeping or resting

• pros and cons of sedatives
Physical therapy

• Graduated mobilisation
• Specific exercises targeting increased movement and functions in affected area
• May need to involve community physio
• General exercise and fitness training
• Hydrotherapy - swimming
Treating co-morbid psychiatric problems

• **For the young person with depression**
• **Immediate referral** to secondary care mental health services for anyone who has
  – Serious suicidal intent
  – Psychotic symptoms
  – Severe self neglect
• **Urgent referral** to secondary care for
  – Severe depression
  – Suspected bipolar disorder
Depression

• Mild to moderate initially managed with
  – Active listening
  – Problem identification and simple problem solving
  – Simple self-management – exercise, activity routines, good sleep (thelowdown.co.nz is a good resource)
  – Enlisting/strengthening other supports eg family, SGC
  – Regular review 1-2 weekly
  – May need active management of somatic symptoms and rehabilitation as well
  – Promising computerised/web-based CBT programs
What next

• If worsening, or no improvement after 6 weeks refer to secondary care mental health

• Antidepressants
  – On advice of child and adolescent psychiatrist for moderate to severe depression
  – Fluoxetine has best evidence base in young people
  – Start low with 5-10 mg mane after food, ↑ to 20mg
  – Must warn about early increase in anxiety/agitation and in suicidal ideation. Family and GP monitoring important
  – No evidence of increased suicide with fluoxetine
Anxiety

• Simple behavioural and cognitive strategies
  – Parents must be on board – may themselves be anxious
  – Simple relaxation
  – Graduated exposure to things the child is anxious about
  eg return to school, sleeping in own room
  – Parents caring but firm
  – Treatment of co-morbid depression helps in adolescents

• Resources include ‘Coping Cats’, ‘How to help your anxious child’, RTLBs for school refusal
Useful web-sites for young people with depression or anxiety

- [www.thelowdown.co.nz](http://www.thelowdown.co.nz)
- [http://moodgym.anu.edu.au](http://moodgym.anu.edu.au)
- [http://ecouch.anu.edu.au](http://ecouch.anu.edu.au)
- Beyondblue website in Australia
Addressing current stressors in the family

- Parental mental health problems
- Marital conflict, domestic violence
- Too busy to spend adequate time with the child
- Wider family issues
Pharmacotherapy

• Regular paracetamol or NSAID
• Low dose amitriptyline (10-20mg nocte) has demonstrated effectiveness in chronic pain + night-time sedation
• Specialist pain/symptom medications
  – Newer anticonvulsants for neuropathic pain
  – clonidine transcutaneous patches for neuropathic and central pain
• SSRIs for severe depression/anxiety
Other people who may be helpful

• Within the practice
  – Practice nurse
  – Practice psychologist

• School system
  – School guidance counsellor, dean, nurse
  – RTLB resource teacher for behaviour and learning
  – GSE group special ed.
Other important factors

- **Regular scheduled review**: frequent initially, try to avoid ‘crisis’ appointments
- **Regular multidisciplinary review** if other healthcare professionals/school etc involved (can use email, brief phone conference)
- control ‘doctor shopping’
- actively engage key family members
- liaison with school and health school
Outcome

- Most children with pain syndromes improve and recover
- 25-50% of children with RAP have continuing abdominal discomfort in adulthood
- Children respond well to anxiety treatment
- Vulnerable children may need early intervention/prevention plans for high stress times
Who doesn’t get better

- Parental fixation on undiscovered pathology
- Overwhelming and continuing stressors
- Severe child psychopathology
- Long history of multiple somatic complaints
- Severe family somatisation disorder
Reference list

• ‘Be the Boss of Your Pain’ Culbert T and Kajander R,(2007) Free Spirit Publishing

