Medically Unexplained Physical Symptoms in Children and Young People

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Overview

- The problem
- Treatment Approaches
- Case Presentation

Medically Unexplained Symptoms definitions...

- Defined as symptoms with no organic cause, or that are out of proportion to underlying illness (Royal College of Psychiatrists, 2012).
- DSM-5: “Somatic symptom & related disorders”

Symptoms are common

- 10-30% of children experience physical symptoms that are unexplained by physically illness or disorder.
- The most common symptoms include headache, abdominal pain, fatigue and motor weakness.
- Symptoms commonly co-occur.
- 15% children report 4+ symptoms.

Usual child and family responses to physical symptoms

- Fear
- Anxiety
- Anger
- Helplessness
- Protection
- Avoidance


Barbara Burch
Parents become more anxious or angry and we label them as disturbed and/or difficult
Parents search for a better more sympathetic doctor and vow not to stop until they have found the cause of their child's illness
The child becomes more distressed by the parents distress
No one knows how to explain the illness to others

Childhood MUS is associated with:
- High family pre-occupation with physical illness.
- High parental academic and behavioural expectations.
- Family stress.
- Social burden.
- Abuse and neglect.

80% of children report life stressors occurring within 12 months of onset of MUS, including:
- Bullying requiring school action.
- Parental separation.
- Death of a relative or friend.
- Hospital admission of a parent or sibling.
- School examination.
- Break up with a best friend.
- Abuse requiring social services referral.

MUS are often associated with Psychiatric Disorders
- MUS is linked with common psychiatric disorders such as anxiety, depression and disruptive behaviour disorders, both at first presentation and in adulthood.
- 30-50% of children with MUS have associated psychiatric comorbidity.

Impact of MUS in Childhood
- MUS is associated with impairments in school and social functioning.
- Symptoms often persist into adulthood.
- Repeated medical visits are common.
  - In adults, accounts for up to 30% of GP consultations.
- Annual healthcare costs of MUS in UK exceed £3.1 billion.

MUS: The Scale of the Problem Adults
- MUS account for up to 30% of GP appointments (Khan et al., 2003).
- MUS accounts for over 50% of all secondary care appointments (Nimnuan, 2001).

<table>
<thead>
<tr>
<th>Specialism</th>
<th>Percentage of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gynaecology</td>
<td>65%</td>
</tr>
<tr>
<td>Neurology</td>
<td>62%</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>58%</td>
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<tr>
<td>Cardiology</td>
<td>53%</td>
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<tr>
<td>Dentistry</td>
<td>37%</td>
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</tbody>
</table>


**MUS: The Scale of the Problem**

Child

- “Different from adults, although of course there are overlaps” (Eminson, 2007).
- No clear data on incidence / prevalence.

**Healthcare Trajectories**

Adults

- Compared to “organic” illness - more primary care visits, more secondary care visits, more emergency department visits and more inpatient visits (Barsky, Orav & Bates, 2005).

**(NHS Plymouth, 2009)**

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**Social Impact & Healthcare Costs**

Child

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**MUS: The Scale of the Problem**

- “The tragedy for doctors......is that they spend their time at medical school learning about the organic causes of disease and then the rest of their lives dealing mostly with patients with non-organic problems.”

(Wessely, 2002).

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**Fig. 1** Hyperventilation profiles in children and adolescents assessed for PNES and in controls. The shaded blue area depicts the homeostatic range for arterial CO₂. The top blue line depicts controls. Controls showed a clear pattern of PCO₂ changes during the HV task: a baseline PCO₂ within the homeostatic range, a steep drop in PCO₂ during HV, and a prompt return to homeostasis during recovery. The middle red line depicts the 60 children and adolescents with PNES who participated in the study. Children and adolescents with PNES showed a downwardly skewed HV challenge profile suggesting difficulties with PCO₂ regulation. The bottom black line depicts the subgroup of 32 children and adolescents who whose PNES were typically preceded by “triggered by” — HV.

**The respiratory control of carbon dioxide in children and adolescents referred for treatment of psychogenic non-epileptic seizures**

No formal guidance from NICE.

Department of Health (2009) stated that: "Commissioning strategies need to clearly address the psychological component of MUS."

MUS have also been recognised as one of three key areas to improve productivity (King's Fund, 2010).

**Cognitive behaviour therapy (CBT) approaches, often disorder specific** (e.g. Husain et al., 2007, Eminson, 2007).

**Family-Focused/Systemic interventions** (e.g. Kozlowska et al., 2012 & 2013).

Still a relative lack of methodologically rigorous clinical trials.

Modern research advocates the interaction of biological, psychological and social factors in the aetiology of MUS (e.g. Deary et al., 2007; Rief & Broadbent, 2007).

Psychological interventions have demonstrated effectiveness for both:

- **Reduction of symptoms** (e.g. Bleichardt, 2004).
- **Alleviation of distress** (e.g. Hiller et al., 2003).

Of all available treatments, CBT has been described as “the best established” (Kroenke, 2007).

Best established treatment for chronic fatigue syndrome, irritable bowel syndrome and headache.

Drawing evidence together:

- Non-judgemental approach to symptoms – engaging families as partners.
- Validation of distress and difficulties.
- Shared understanding of symptoms, avoid mind-body dualism.
- Need to closely involve family members/school in treatment.
- Focus on functional impact
  - Attendance/performance at work/school
  - Socially with family and peers
  - Health service use

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**Evidence-base for Treatment?**

**Psychological Interventions for Children with Functional Somatic Symptoms: A Systematic Review and Meta-Analysis**


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Key themes and suggestions

- Medically unexplained symptoms common in children and young people.
- Look out for patterns that suggest them, and detect early.
- They are disabling, impair quality of life, can be difficult to diagnose and treat, and can be frustrating.
- They require:
  - Collaborative working between primary care, mental health and paediatrics — local care pathways/guidelines.
  - A non-judgmental, engaging approach.
  - Work with the family and child’s network especially school.
  - Most evidence for a practical, behavioural, family based CBT treatment protocol with identification and amelioration of environmental stressors.

Summary

- High prevalence of MUS.
- Costly to both individuals and wider society.
- Many patients have multiple symptoms?
- Opinions rather than data...
- Need for multidisciplinary treatment approach
- Need for close paediatric/family/school/social care involvement.