

THE BOY WHO COULD NOT WALK

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Topic: Somatoform disorders

Abstract: Somatoform disorders are characterized by physical symptoms that cannot be explained by a neurological or general medical condition. Health care providers must be aware of the importance of a combined medical and psychiatric approach to the diagnosis and treatment of youngsters with these disorders. This is the story of Alex, a 7-year-old boy who was hospitalized for evaluation of a one-month history of lower extremity pain and inability to walk.

Goal: To provide learners with an understanding of somatoform disorders, and to illustrate the importance of a combined medical and psychiatric approach to the diagnosis and treatment of these disorders.

Objectives: As a result of this session, learners will be able to

- Discuss the diagnostic criteria required for somatoform disorders.
- Develop an understanding of the biopsychosocial approach in the assessment of somatoform disorders.
- Understand the role of an integrated medical and psychiatric treatment plan in the management of these disorders.

Themes: Behavioral Pediatrics, Child Mental Health

Bright Futures Core Concepts: This case can be used to highlight communication and partnership.

Materials Provided:

- Facilitator Guide
- 3-part Case Narrative: Part I, Part II, Epilogue
- Handout #1: Criteria for Conversion Disorder
- Handout #2: Conversion Disorder in Children and Adolescents
- Handout #3: Integrated Medical and Psychiatric Approach to Somatoform Disorders
- References

Facilitator Preparation: Facilitator should thoroughly review this guide and other materials provided. We anticipate that case facilitator will modify implementation of the case session to best fit their educational setting and learners. For a summary of recommendations on leading discussions, please see Appendix #1 in the Introduction to this manual.

THE BOY WHO COULD NOT WALK: FACILITATOR GUIDE

Introduction

The complex interactions between mind and body are most apparent in the somatoform disorders. Somatization refers to the unintentional production of physical symptoms in response to emotional conflicts or stressors. Somatic symptoms are often transient, and resolve without psychiatric intervention. When the symptom(s) causes functional impairment (i.e., repeated school absences), the diagnosis of somatoform disorder must be considered. The term somatoform disorder refers to a group of psychological disorders in which the patient experiences physical symptoms that have no apparent medical etiology, or that are grossly in excess of what would be expected given the physical findings, and in which emotional factors are linked to the onset and maintenance of the symptoms. Somatoform disorders can also occur in the presence of medical pathology. For example, patients with psychogenic seizures (“pseudoseizures”) often have documented epilepsy. The successful diagnosis and treatment of somatoform disorders requires ongoing communication and collaboration between pediatricians and mental health providers.

There are five major diagnoses that fall under the heading of somatoform disorder: Conversion disorder, somatization disorder, pain disorder, hypochondriasis, and body dysmorphic disorder. This case will focus on developing an understanding of Conversion disorder.

OPEN THE DISCUSSION: INTRODUCE THE CASE TITLE AND THE SESSION GOAL. EXPLAIN THAT THIS WILL BE AN INTERACTIVE CASE DISCUSSION AND NOT A LECTURE. DISTRIBUTE PART I OF THE CASE AND ASK ONE OR MORE OF THE PARTICIPANTS TO READ IT ALOUD.

Part I: The Presentation

Alex is a 7-year-old boy who is hospitalized with right leg pain and inability to walk for 5 weeks. Repeated outpatient physical examinations had been normal, as were x-rays of his knee and hips. Upon admission, Alex’s physical examination is unremarkable except for mild atrophy of his right calf muscles. No focal abnormalities are noted. Consultations are obtained from specialists in orthopedics, neurology, and hematology. Repeat x-rays and bone scans of both lower extremities are normal. A pelvic ultrasound and bone marrow aspirate are unremarkable. The entire medical team and family agree that the right calf atrophy may be secondary to disuse. A psychiatric consultation is requested.

The psychiatric interview with Alex and his mother reveals that he has no prior history of emotional difficulties or somatic complaints. His mother describes increased sadness and social withdrawal in the month prior to his leg complaints. Alex was also noted to have insomnia, mild anorexia, and severe anxiety that has prevented him from going to school, where he is in the second grade.

Alex had been living with his parents and younger brother. His parents' relationship is characterized by frequent fights, which Alex often witnesses. Alex's father has been intermittently involved with the criminal justice system due to use of illicit drugs. One month prior to Alex's presenting complaints, his parents separated and his father moved out of the home. Shortly thereafter, a maternal uncle with a right below-the-knee amputation moved in, following his release from the hospital. Alex became preoccupied with his uncle's prosthesis. On Christmas day, Alex complained of right leg pain and would only walk with his uncle's cane. He verbalized fears to his mother that his leg would need to be amputated like his uncle's had been. Family psychiatric history was significant for depression and alcohol abuse in Alex's father and paternal grandfather.

On mental status examination, Alex is a well-developed, well-nourished boy lying in bed, appearing sad. He is cooperative with intermittent eye contact, and he refuses to allow his mother to leave his side. He is alert and oriented to person, place and date. Speech is normal in rate, rhythm and clarity. His affect is significant for sadness and anxiety. There is no evidence of psychosis, and Alex denies thoughts of harming himself or others.

Following this reading, ask all participants "So what do you think about this case? What would you like to focus on during our discussion today?" List agenda items on a blackboard or flipchart. Then use the questions below to guide the discussion. Remember that the key to successfully leading a small group is facilitation of the discussion rather than lecture. Draw as many participants as possible into the discussion. Allow silences while group members think about questions. Present material from the discussion guide only when needed to complement or redirect the group discussion.

GUIDING QUESTIONS FOR PART I DISCUSSION:

What further history would you like to obtain from Alex or from his parents?

Alex's physical symptoms are preceded by significant psychosocial stressors. Participants may have further questions or comments about the psychosocial history just presented. Explain the importance of eliciting a complete psychosocial history in order to explore emotional factors that may be contributing to the symptom presentation.

Are further medical tests or consultations needed? Why or why not?

Some participants may suggest more medical tests or consultations, while others may want to pursue the impact of Alex's psychosocial stressors on the onset and maintenance of his symptoms. The pediatrician may not view the symptom(s) as "real" once he or she suspects that psychological factors are contributing to the symptom(s). This can lead to feelings of frustration and a desire to transfer the patient's care to the psychiatry service. Participants should be reminded of the benefits of a combined medical/psychiatric approach in working with these patients.

What do you think is the most likely diagnosis at this point?

Allow participants to discuss the differential diagnosis and then decide upon the most likely diagnosis. Participants may attempt to determine whether the diagnosis is either medical or psychiatric. Remind them that medical and psychiatric disorders may coexist.

What factors lead you to suspect that emotional factors may be playing a role in the symptom presentation?

Factors suggesting that emotional factors may be playing an important role include:

- Multiple medical workups that have revealed no physical basis for symptoms
- Psychological stress temporally related to onset of symptoms
- Prior history of recurrent somatic complaints
- History of family stress
- History of family psychopathology
- Presence of a symptom model, e.g., family member with similar deficits

What is your next step in managing Alex's problem?

Participants should be reminded of the usefulness of a combined medical/psychiatric approach in the workup of children with physical complaints of uncertain etiology.

How should the pediatrician explain to the family that he or she is requesting a psychiatric consultation?

Explain that families of children with physical symptoms are often focused on finding a “medical” etiology to explain the symptoms, and may be resistant to the idea of a psychiatric consultation. The family should be reassured that the pediatrician doesn't think the symptoms are “all in the child's head”, but that he or she is requesting the consultation as part of a complete evaluation of the child. The results of the psychiatric evaluation with its “biopsychosocial” approach can then be integrated with the existing medical data in order to arrive at a more complete understanding of the child's symptoms.

How would you discuss the team's findings with the family members, who may believe the symptoms are solely due to a medical condition?

The next step is an informing conference, which includes the pediatrician, psychiatrist, and family members. In this meeting, the patient and family are informed that the medical workup has been negative. Negative findings should be communicated by the pediatrician as “We have good news...we have ruled out a number of serious illnesses.” rather than “We couldn't find anything.” Statements such as “The symptoms are in your head.” or “The symptoms are not real.” should be avoided. The psychiatrist can then, in a supportive and non judgmental manner, discuss the significant psychosocial issues that appear to be related to the symptoms. Incorporating the family's way of

thinking about the problem into a more biopsychosocial formulation often facilitates their acceptance of the new formulation of the problem.

In severe cases, hospitalization on a medical/psychiatric unit may be necessary for appreciable improvement of symptoms. There the child participates in intensive individual, family, and group therapy aimed at assisting the patient and family in developing healthier ways to cope with conflicts and stressors. In addition, the child receives ongoing medical monitoring and physical therapy when indicated.

DISTRIBUTE PART II OF THE CASE AND ASK ONE OF THE PARTICIPANTS TO READ IT ALOUD.

Part II: The Transfer

Alex is transferred to the children's psychiatric unit. Over the next several days, his condition improves dramatically with a combination of psychotherapy, physical therapy and mobilization. Psychological intervention is primarily aimed at linking the stressful events with Alex's inability to walk.

The child psychiatry resident's summary states: "Alex presented as a child with no demonstrable medical illness to account for his altered motor functioning and pain. There was evidence of significant ongoing interpersonal stressors in a depressed and anxious boy who was unable to safely express negative affects (primary gain) within his family. The symptoms provided distraction from the parental disputes and prevented him from going to school (secondary gain). The uncle's disability was understood as representing a symptom model. A diagnosis of Conversion disorder was made on the basis of these factors in conjunction with the temporal relationship between his physical complaints and his father's departure."

These impressions were shared with the pediatric staff. The primary pediatrician then discussed the medical and psychiatric findings with the family. The need for an integrated and coordinated follow-up program with both pediatrics and psychiatry was emphasized. A program involving joint appointments and ongoing communication between both disciplines was arranged with the family prior to discharge.

During the 2 months following his discharge from the hospital, Alex's physical and emotional symptoms fluctuated and correlated with family stressors, including the father's eventual imprisonment and permanent eviction from the home. In psychotherapy sessions, Alex largely used drawing as a means of expressing both his anger toward his father and hopes for his parents' eventual reconciliation. Serial pediatric examinations revealed a slight progression in right lower extremity atrophy with increased vascularization and a positive right Babinski reflex.

GUIDING QUESTIONS FOR PART II DISCUSSION

What are the diagnostic criteria for Conversion disorder?

Explain that Conversion disorder is not a diagnosis of exclusion. Patients with a prior history of somatic complaints, the temporally related family stresses and the symptom model, combined with symptoms unexplained by a medical condition support the diagnosis of conversion disorder.

Distribute Handout #1: DSM-IV criteria for Conversion disorder and allow participants a few minutes to review the contents.

Distribute Handout #2: Conversion disorder in Children and Adolescents, for participants to use as future reference.

Do you agree or disagree with the diagnosis of Conversion disorder? Why?

Facilitator should read through the diagnostic criteria for Conversion Disorder, pausing after each one to allow participants to discuss aspects of the case that fit or do not fit the criteria.

What is the role of the pediatrician once the diagnosis of Conversion disorder has been made?

A medical/psychiatric team is assembled for ongoing follow-up. The team supports the pediatrician's ongoing monitoring and treatment for possible medical illness as well as the psychiatrist's interventions. The pediatrician should provide ongoing follow-up care while avoiding unnecessary medical investigations and procedures. However, the pediatrician should never ignore the child's complaints or assume that symptoms are due to psychiatric illness. Frequent reassessments through history and physical examination are never contraindicated. They may uncover co-occurring, complicating, or previously undiscovered medical conditions or, when negative, provide needed reassurance to the child and family members. The use of physical therapy with a graduated return to the child's usual activities is a helpful intervention for many patients.

Distribute Handout #3: Integrated Medical and Psychiatric Approach to Children and Adolescents with Somatoform Disorders for learners to use as future reference.

Given Alex's worsening physical symptoms, what would you do next?

The worsening physical symptoms warrant further medical investigation and should not be attributed to the Conversion disorder. It is important to remember that children with Conversion disorder may also have medical pathology.

DISTRIBUTE THE EPILOGUE AND ASK SOMEONE TO READ IT ALOUD.

Epilogue:

At subsequent readmission to the medical service, a CT scan revealed a spinal cord tumor located in the lower sacrum. A second bone marrow aspirate was consistent with large cell lymphoma. Currently, Alex is undergoing chemotherapy. He remains in psychiatric treatment directed at coping with his medical illness and ongoing familial stressors.

Refer to the learning objectives and goals, and summarize the key teaching points that were made. This will give the group a sense of accomplishment, and will reinforce the important messages. Suggest further sources of reading or other information if there are agenda items that were not covered in the discussion.

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PART I: CASE NARRATIVE

The Presentation

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Alex had been living with his parents and younger brother. His parents' relationship is characterized by frequent fights, which Alex often witnesses. Alex's father has been intermittently involved with the criminal justice system due to use of illicit drugs. One month prior to Alex's presenting complaints, his parents separated and his father moved out of the home. Shortly thereafter, a maternal uncle with a right below-the-knee amputation moved in, following his release from the hospital. Alex became preoccupied with his uncle's prosthesis. On Christmas day, Alex complained of right leg pain and would only walk with his uncle's cane. He verbalized fears to his mother that his leg would need to be amputated like his uncle's had been. Family psychiatric history was significant for depression and alcohol abuse in Alex's father and paternal grandfather.

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THE BOY WHO COULD NOT WALK PART II: CASE NARRATIVE CONTINUED

The Transfer

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PART III: CASE NARRATIVE CONCLUSION

Epilogue

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THE BOY WHO COULD NOT WALK HANDOUT #1

DSM-IV Criteria for Conversion Disorder

Conversion Disorder:

1. One or more symptoms or deficits affecting voluntary motor or sensory function that suggests a neurological or other general medical condition.
2. Psychological factors are judged to be associated with the symptom or deficit because the initiation or exacerbation of the symptom or deficit is preceded by conflicts or other stressors.
3. The symptom or deficit is not intentionally produced or feigned (as in Factitious Disorder* or Malingering*).
4. The symptom or deficit cannot, after appropriate investigation, be fully explained by a general medical condition, or by the direct effects of a substance, or as a culturally sanctioned behavior or experience.
5. The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.
6. The symptom or deficit is not limited to pain or sexual dysfunction, does not occur exclusively during the course of Somatization Disorder**, and is not better accounted for by another mental disorder.

Specify type of symptom or deficit:

With Motor Symptom or Deficit

With Sensory Symptom or Deficit

With Seizures or Convulsions

With Mixed Presentation

* Factitious Disorder and Malingering refer to symptoms that are intentionally produced or feigned. In Factitious Disorder, the motivation is to assume the sick role and to obtain medical evaluation and/or treatment. Malingering refers to symptoms intentionally produced or feigned in order to obtain financial compensation, drugs, or evasion of responsibilities.

** Somatization Disorder refers to a chronic pattern of recurrent and multiple somatic complaints for which no medical cause can be determined despite repeated evaluations.

THE BOY WHO COULD NOT WALK HANDOUT #2

Conversion Disorder in Children and Adolescents

Epidemiology:

- Incidence: between 0.5 and 10%
- Three times more common in adolescents than preadolescents
- Equal distribution among school-age boys and girls
- More common in adolescent girls than boys
- Rare in children under 5 years old

Typical symptoms:

- Motor: paralysis, ataxia, aphonia, dysphagia, urinary retention, and seizures
- Sensory: blindness, deafness, loss of touch, pain sensation, and diplopia
- Most common: psychogenic seizures (“pseudoseizures”, “emotional”, or “nonepileptic” seizures), unexplained falls, and episodes of fainting, followed by gait and sensory deficits

Etiology - many theories:

- Psychological: symptoms are direct symbolic expression of an underlying psychological conflict. Conflict is converted to a physical symptom, which serves to keep conflict from consciousness and minimize anxiety (“primary gain”). Physical symptom can also provide escape from unwanted consequences or responsibilities (“secondary gain”).
- Biological: symptoms precipitated by excess cortisol, which triggers reactive inhibition signals at synapses in sensorimotor pathways.
- Learning: child learns benefits of sick role and is reluctant to give up symptoms. Increased parental attention plus avoidance of responsibilities may reinforce symptoms.
- Family: factors associated with conversion symptoms include psychological disorders, alcohol abuse and history of somatic preoccupation. Focusing on child’s illness distracts family from ongoing conflicts.

Diagnosis:

- Physical examination: symptoms do not conform to known anatomical pathways and physiological mechanisms. If physical symptoms are present, they may relate to either muscle atrophy from disuse or to sequelae of medical procedures.
- Laboratory studies: no specific laboratory studies are associated with Conversion Disorder. Video-electroencephalographic monitoring often used to investigate seizure disorders. Lack of EEG correlation with the seizure activity is suggestive of Conversion Disorder (“psychogenic seizures”).
- Important interview criteria:
 - Psychological stress temporally related to symptom onset
 - Prior history of conversion symptoms

Prior history of recurrent somatic complaints
Family stress and/or psychopathology
Symptom model

Course: symptoms typically occur suddenly and temporarily (most often seen by pediatricians), but can become chronic (then referred to psychiatrist).

Treatment: integrated medical and psychiatric approach is most helpful

THE BOY WHO COULD NOT WALK HANDOUT #3

Integrated Medical and Psychiatric Approach to Somatoform Disorders

Psychiatric Evaluation

- Elicit diagnostic criteria
- Facilitate consolidation or better understanding of experience by family

Formulation

- Pediatrician and psychiatrist integrate their findings
- Resist labeling symptoms as either medical or psychiatric; instead aim to arrive at “biopsychosocial” understanding of the child’s symptoms

Informing Conference

- Provide family with medical model as frame of reference
- Pediatrician and psychiatrist work together to reframe family’s understanding of symptoms

Interventions

- Medical
 - Ongoing pediatric follow-up
 - Physical therapy as needed
- Psychiatric
 - Psychotherapy
 - Cognitive-behavioral therapy
 - Family therapy
 - Psychopharmacology

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