



# Conversion disorder in children and youth

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## Background

Conversion disorder (CD), an uncommon but highly disabling condition in the paediatric population, is categorized within the group of disorders known as “Somatoform Disorders” in the Diagnostic and Statistical Manual (DSM-IV). Children and adolescents presenting with CD describe symptoms that are suggestive of a medical illness but on further history, examination and investigation cannot be explained in terms of known pathology and pathophysiology. Most commonly, the symptoms represent neurological disease. Frequently reported symptoms include pseudoseizures, paraesthesias, paresis, abnormal gait and other abnormal movements. The symptoms are not intentionally produced. According to the DSM-IV definition, there must be a recognized psychological stress that can be related to the onset of symptoms; however, this may not be immediately evident at presentation.

Many patients are often severely impaired and require admission to hospital for costly investigations and consultations with a range of health professionals, including general paediatricians, paediatric neurologists, psychiatrists, physiotherapists and occupational therapists. Failure of aggressive treatment can lead to serious long-term physical complications, such as muscle wasting, osteoporosis, scoliosis or even contractures. Affected children and adolescents often have psychosocial complications, including educational failure, social isolation, psychological distress and psychiatric morbidity.

PROTOCOLS



Despite the enormous personal suffering and health resource implications of CD, the epidemiology and clinical burden in children and adolescents in Canada have not been documented. Further, there are no clear guidelines for the management of children and youth presenting with this difficult diagnosis. The proposal is the first study aimed to describe the frequency, pattern and short-term outcomes of paediatric CD in Canada. Basic descriptive, epidemiological research is crucial to informing policy on appropriate investigation, management and resource allocation for service provision for children and youth with this seriously impairing condition.

## Methods

The CD study will be conducted through the CPSP. Clinically practicing paediatricians and paediatric subspecialists will be asked to report all new cases of CD on a monthly basis. At the launch of the study, participants will receive the study case definition and protocol consistent with DSM-IV-TR and examples of common presentations of CD. For each initial monthly report, participants will be asked to complete a detailed questionnaire seeking non-nominal demographic and clinical information to ensure that the case definition is met.

## Case definition

Report any new patient less than 18 years of age with suspected or diagnosed conversion disorder (CD)\* defined as the persistent appearance of symptoms/signs that affect the patient's:

- voluntary motor function (e.g., weakness, abnormal gait or movements, difficulty with swallowing or loss of speech), **and/or**
- sensory function (e.g., loss or diminished sensation of touch, sight, or hearing), **and/or**
- non-epileptic seizures ('pseudoseizures' or 'psychogenic seizures')

and suggest a neurological or medical disease/condition

### AND

- may be accompanied by psychological factors at presentation,
- cause significant distress and/or impairment in daily activities, such as self-care, school, play, peer and family relationships and/or activities,

### AND

- cannot be adequately explained by a medical condition, substance abuse, or other mental disorder according to the clinical judgment of the treating physician after a comprehensive physical exam and appropriate investigations,
- show no evidence that they have been intentionally produced.

\* If the diagnosis is uncertain or awaiting confirmation, the case should still be reported.

## Exclusion criteria

Patients who have predominantly or exclusively symptoms that are:

- secondary to substance abuse;
- intentionally produced;
- secondary to pain disorder, somatization disorder or fatigue;
- due exclusively to another psychiatric disorder, such as depression, psychosis or tic disorder diagnosed by a child psychiatrist.



## ***Conversion disorder in children and youth (continued)***

### **Objectives**

- 1) Gain national data on the incidence of CD in Canadian children and youth seen by child health specialists.
- 2) Describe the clinical features of CD at presentation.
- 3) Identify associated features, such as comorbid psychiatric or medical illness and family history of psychiatric illness.
- 4) Describe the pattern and severity of illness, associated psychosocial features, and use of medical resources in children and youth with CD.
- 5) Document the current management of children and youth with CD, including investigations and interventions.
- 6) Determine the duration of illness and the short-term outcome.

### **Duration**

September 2011 to August 2013

### **Expected number of cases**

A total of 200 cases is estimated to meet the inclusion criteria.

### **Ethical approval**

Research Ethics Board of McMaster University and Hamilton Health Sciences Corporation

### **Analysis and publication**

Analysis will include case characteristics, population estimates, description of clinical features of the illness, comorbidity, family history, psychosocial antecedents and health service use. Regarding the interpretation of difficult cases in order to arrive to a consensus, three interdisciplinary members of the research team at McMaster University will meet to review diagnostically challenging cases. Where consensus is not possible, a two out of three majority will settle the dispute.

### **Bibliography**

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## Appendix 1: Case examples

### Case study 1 – True conversion disorder

A 15-year-old pregnant Hispanic girl presented in the emergency room with her right elbow held in a flexion position and her left toe pointed downward in plantar extension. When asked about her symptoms, she stated with little affect that, “I’ll get used to it.” Her presentation could not be explained by any known medical condition and she was then diagnosed with conversion disorder. Additionally, her symptoms tended to ‘disappear’ with distraction. She subsequently reported that her boyfriend, who was the father of the baby, had recently started seeing another girl. She noted she was so angry with her ex-boyfriend that she wanted to hit and kick him. Yet, with her current symptoms, she could not do so.

This is consistent with a diagnosis of conversion disorder because:

- The symptoms are neurological in nature and are not typical of any known neurological lesion.
- The “I’ll get used to it” is an example of *La Belle Indifference*.
- There is a psychological stressor that seems to have precipitated the symptomatology.

### Case study 2 – Conversion disorder definition not met

A nine-year-old girl was evaluated for possible rheumatoid arthritis. She woke up with pain in one knee, which caused her to limp through her day at school. Findings from her medical workup were negative, and the pain shifted to her other leg. Social history revealed that her maternal grandfather, who had a limp caused by an old hip injury, had died three weeks before the onset of symptoms. She was close to him and felt guilty for not playing checkers with him during their last visit. The pain waxed and waned but persisted for 10 days. The pain gradually decreased and resolved with supportive medical evaluation and family attention.

This is NOT an example of conversion disorder because:

- While there is a psychological component that contributes to this patient’s presentation, the symptoms are limited to pain with no involvement of neurologic symptoms.
- The limp, in this case, occurs as a result of the pain.
- This is an example of ‘pain disorder’.