

NEUROPSYCHIATRIC MANIFESTATION OF SYDENHAM'S CHOREA

SYSTEMATIC REVIEW

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Sydenham's chorea is a common movement disorder globally. It can develop some time after an infection with *Streptococcus pyogenes*. It causes problems with control of movements and also can be associated with significant changes in emotions and behaviour as well as a range of psychiatric symptoms. Doctors aren't sure how best to understand the mental health effects of Sydenham's chorea. A study group of child and adolescent psychiatrists was set up to look at all of the information available in accounts of children with mental health conditions associated with Sydenham's chorea that were published in reliable medical literature from 1946- 2014.

The group concluded that children who have Sydenham's chorea are at increased risk of developing psychiatric symptoms and disorders associated with their illness. During the illness, symptoms such as irritability, emotional lability (rapidly swinging moods) and emotional regression (seeming younger than their age in terms of emotion) are commonly described. The published research mainly related to the presence of diagnosable disorders occurring along with Sydenham's chorea. This association is strongest for obsessional compulsive disorder (OCD), attention deficit hyperactivity disorder (ADHD) and mood disorder (especially depression). Children have also been reported showing signs of anxiety and tic disorders and (very rarely) psychotic symptoms (eg hallucinations). For some children these problems persist after movement problems have stopped. There may be an increased risk of mental health problems if the movement disorder does not completely resolve.

In addition, the group found some published articles which can only provide limited evidence that might suggest possible factors affecting the impact of Sydenham's chorea. These include suggestions that certain children may be more vulnerable to mental health problems associated with Sydenham's chorea. For example, boys may be more likely to become obsessional and girls to become anxious. Other factors that may make children more vulnerable to mental health problems with Sydenham's chorea include pre-existing signs of anxiety or ADHD. There is also a possible increased risk if there is a family history of similar problems. There is some evidence that suggests Sydenham's chorea can lead to changes in cognitive function during the illness and for some individuals this may lead to long term change but the picture is not clear. Some research suggests that having Sydenham's chorea may have some impact on future education and career in the long term, but the extent of this effect is not known.

This review highlights that Sydenham's chorea is often linked to significant emotional and psychiatric symptoms, reinforcing the need for a multidisciplinary approach that includes psychological and psychiatric support to ensure that emotional and mental health needs are met. While the association with mental health problems is clear, the underlying causes remain uncertain and further research is needed to better understand and manage these complex interactions.