The differential diagnosis of children with joint hypermobility: a review of the literature

LJ Tofts*, EJ Elliott, C Munns, V Pacey and DO Sillence

Address: The Children's Hospital at Westmead, Sydney, Australia
* Corresponding author

Background
To critically review publications relating to the diagnosis of joint hypermobility and instability and discuss an evidence-based approach to children presenting with joint hypermobility.

Methods
Papers with an emphasis on the diagnosis of joint hypermobility including Heritable Disorders of Connective Tissue (HDCT) in which joint hypermobility is a prominent feature were identified.

Results
3330 papers were identified, 1534 of which pertain to instability of a particular joint. 1666 papers related to the diagnosis of Ehlers Danlos syndromes and a further 330 to joint hypermobility.

Conclusion
There are inconsistencies in the literature on joint hypermobility and how it relates to and overlaps with the milder forms of HDCT. There is no clear and reliable method of differentiating between "Joint Hypermobility Syndrome", familial articular hypermobility and Ehlers-Danlos syndrome (hypermobile type). These three disorders may, in fact be the same. We have described our approach to a child presenting with joint hypermobility and the expert opinion and published evidence from which this has developed.

We conclude that there is value in both clearly identifying the underlying genetic cause of an individual child's joint hypermobility as well as identifying those hypermobile children who have symptoms such as pain and fatigue and would benefit from multidisciplinary rehabilitation management.

We recommend that the term "Joint Hypermobility Syndrome" should be reserved to describe symptom(s) which are complications of joint hypermobility. We use this term in children who have symptomatic joint hypermobility irrespective of the underlying HDCT.