### **POSTER PRESENTATION**



**Open Access** 

# Evaluation of hypermobility syndrome associated with vesico-ureteric reflux in children

Reza Shiari<sup>1,2\*</sup>, Reza Amir Askari<sup>1</sup>, Masumeh Mohkam<sup>1,2</sup>

*From* 18th Pediatric Rheumatology European Society (PReS) Congress Bruges, Belgium. 14-18 September 2011

#### Background

Joint hypermobility Syndrome is an inherited disease of connective tissue with symptoms of musculoskeletal involvement. On the other hands, Idiopathic reflux occurs in approximately 1% of the children and cause kidney scar and hypertension.

#### Aims

Considering the etiology of hypermobility syndrome that is involvement of connective tissue as a result of a disruption in the synthesis of collagen, there is a possibility of other organs involvement such as urinary system which the structure of connective tissue plays an important role. The aim of this study was to determine the association of hypermobility syndrome with vesico-ureteric reflux in children.

#### Materials and methods

This research was performed on 70 children between 3-16 years old with vesico-ureteric reflux and 70 normal children as a case control study.

#### Result

There was an association between urinary tract infection and hypermobility syndrome (P=0.001). Urinary reflux had a significant relation with myalgia (P $\leq$ .0.026). There was an association between myalgia and arthralgia, with hypermobility syndrome (P $\leq$ .0.001) and (P=0.03) respectively. We found a significant association between vesico-ureteric reflux and hypermobility syndrome (P $\leq$ 0.001).

<sup>1</sup>Shahid Beheshti University of Medical Sciences, Mofid Children Hospital, Tehran-Iran

Full list of author information is available at the end of the article



#### Conclusion

Considering the significant relation of vesico-ureteric reflux and hypermobility syndrome, it's been recommended that children with hypermobility syndrome are better evaluated for urinary tract infection.

#### Author details

<sup>1</sup>Shahid Beheshti University of Medical Sciences, Mofid Children Hospital, Tehran-Iran. <sup>2</sup>Pediatric Infectious Research Center (PIRC), Tehran-Iran.

Published: 14 September 2011

doi:10.1186/1546-0096-9-S1-P240 Cite this article as: Shiari et al.: Evaluation of hypermobility syndrome associated with vesico-ureteric reflux in children. *Pediatric Rheumatology* 2011 9(Suppl 1):P240.

## Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

) BioMed Central

Submit your manuscript at www.biomedcentral.com/submit

© 2011 Shiari et al; licensee BioMed Central Ltd. This is an open access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

<sup>\*</sup> Correspondence: shiareza@yahoo.com