Tavares et al. Pediatric Rheumatology 2011, 9(Suppl 1):P234 http://www.ped-rheum.com/content/9/S1/P234



# **POSTER PRESENTATION**

**Open Access** 

# Raynaud's phenomenon in pediatric age

M Tavares<sup>1\*</sup>, A Novo<sup>1</sup>, H Sousa<sup>1</sup>, I Silva<sup>2</sup>, I Almeida<sup>3</sup>, M Guedes<sup>1</sup>

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

## **Background**

Raynaud's phenomenon (RP) is characterized by changes in the color of extremities: pallor, cyanosis and erythema. It's prevalence in adults ranges between 3-20% but there are few studies in pediatric age. RP in boys or in children less than 12 years seems more associated to the secondary form.

## Aim

Assessment of RP in children and adolescents referred to Centro Hospitalar Porto, in the last 11 years.

### **Methods**

Retrospective analysis of clinical files of children and adolescents in which RP was the reason for consultation. Statistic analyses: SPSS version 19.

#### **Results**

Sixty six cases (71,2% female) met the inclusion criteria. Average age of RP onset was 12,5y with median duration of 3,6y. RP was associated to: erythema pernio (34,8%), inter-phalangeal joints pain (30.3%), hands edema (28,8%), acrocyanosis (18,2%), profuse sweating (12,1%) and trophic changes of fingers pulp (10,6%.). Antinuclear antibodies (ANA) were titled in 64 patients (97%), being positive (>1/80) in ten (15.6%). Capillaroscopy was performed on 43 (65.2%): 32 (74,4%) minor changes (tortuosity and segmental enlargement), four (9,3%) significant changes (giant capillaries, hemorrhagic and avascular areas), seven (16,3%) normal.

Of 43 patients with complete study, five (11,6%) had secondary RP: two with juvenile systemic sclerosis, two in characterization and a probable case of mixed connective tissue disease.

Secondary RP occurred mostly in less that 12-yearsold child. ANA  $\geq 1/320$  and significant changes on capillaroscopy had a significant statistic relationship with secondary RP.

#### Conclusion

RP can occur in children and, as in adults, in most cases is primary. ANA's positivity and changes in capillary bed were predictors of secondary RP.

#### **Author details**

<sup>1</sup>Serviço de Pediatria. <sup>2</sup>Serviço de Cirurgia Vascular. <sup>3</sup>Serviço de Medicina Interna, Centro Hospitalar do Porto.

Published: 14 September 2011

doi:10.1186/1546-0096-9-S1-P234

Cite this article as: Tavares et al.: Raynaud's phenomenon in pediatric age. Pediatric Rheumatology 2011 9(Suppl 1):P234.

# 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

Submit your manuscript at www.biomedcentral.com/submit





<sup>&</sup>lt;sup>1</sup>Serviço de Pediatria