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ASPECTS OF THE BARR TRIAD IN PEDIATRIC PATIENTS**MURGOCI Roxana-Elena¹**Editor: Constantin MUNTEANU, E-mail: office@bioclima.ro

Balneo and PRM Research Journal

DOI: <http://dx.doi.org/10.12680/balneo.2021.452>

Vol.12, No.3 September 2021

p: L38

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Abstract

Introduction. The incidence of scoliosis diagnosed in ambulatory pediatric patients increased as online addressability augmented. Therefore, it was mandatory the assessment of the tripartite correlation known as the Barr triad to identify a prognostic model in the context of its association with appropriate treatment. Classical Barr triad includes scoliosis, flattening of physiological curves, narrowing of the intervertebral space as indirect signs for disc herniation.

Material and methods. 104 ambulatory patients with scoliosis as the main diagnosis randomized, in treatment; Age mean 13.59 ± 2.895 years. From the medical records, input data were extracted as well as the radiological interpretation of the spine for indirect signs; interpretation of data used IBM SPSS Version 25.

Results. The Ponseti Cotrel classification divided the patients' scoliosis as follows: juvenile1- 2.88%, juvenile2- 13.46%, juvenile3-16.35%, adolescent-67.31%, out of which girls 58.65%, boys 41.35%, urban 76.92%, rural 23.08%. Body Mass Index: Normal 69.23%, Obesity 20.19%, Subponderal 10.58%. Pearson Correlation ($p < 0.05$, CI = 95%) reveals $r > 0.980$ for both males and females. Items of Barr triad were identified complete for 70.19% (73 patients- high risk for disc herniation), Chi Square Test statistical significance for $p < 0.05$, Pearson Correlation is $r = 0.999$ for juvenile scoliosis 3 and adolescent one. Scoliosis is type C shape: thoraco-lumbar- 50.96%, thoracic- 20.19%, lumbar-17.31% and combined S shape -11.54%. Complete Barr triad identified a Pearson correlation $r = 0.997$ for girls so it was calculated the median age for a therapeutic window age intervention between 11-14 for females and 14-15 for males. Mild scoliosis occurred in 70 cases out of which thoraco-lumbar are 49 cases. The treatment consists of standard protocol: response rate = 58.90%.

Conclusions. The best functional evaluation can be applied early in the therapeutic window based on clinical tests of functional markers, the magnitude of the Cobb angle, radiography so that the response rate is optimal.