

# Comparative study of non-cycloplegic & cycloplegic objective refraction in hypermetropic patients between 5-15 years of age

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## **Abstract:**

**Purpose:** The purpose of this study was to compare the results of objective refraction obtained by non-cycloplegic and cycloplegic method in hypermetropic children between 5 to 15 years of age, and then prove the effectiveness of cycloplegia for children refraction.

**Study Design:** Descriptive Cross-Sectional Comparative study.

**Subject and Method:** 100 patients between ages of 5 to 15 years presented at out-patient department of Benazir Bhutto Hospital Rawalpindi during 1<sup>st</sup> October 2012 to 31<sup>st</sup> December 2012 and were included in this study. After complete refraction in non-cycloplegic and cycloplegic condition respectively, complete data was recorded and compared to test the null hypothesis.

**Results:** The significant difference between non-cycloplegic and cycloplegic refraction was observed in 73% children. The mean difference was evaluated as 1D. There was more significant effect of cycloplegia in children between age group of 5 to 10 years as compared to children between 11 to 15 years of age.

**Conclusion:** This study showed that cycloplegic method of refraction is very important in young hyperopic children below 15 years of age. So this method should always be adopted when performing refraction of young children. *Al-Shifa Journal of Ophthalmology 2012; 8(2): 84-89*  
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