Comparative Study of Cycloplegic Drugs in Clinical Refraction

ABSTRACT

Accurate measurement of refractive error in uncooperative patients and young children, requires cycloplegia. The aim of the present study was to determine whether cyclopentolate by itself or in combination with 4 times instillation of atropine can be used as a substitute for 10 times instillation of atropine. From 1994 to 1996, 30 patients aged 2-12 years were included in this study. Cycloplegia was undertaken by four different methods in subsequent visits: cyclopentolate 1%, 4 times instillation of atropine, 10 times instillation of atropine plus tropicamide and 10 times instillation of atropine. 26 patients (53% male, mean age: 6.4 years) completed the four stages of the study. Sporadic refraction was significantly different between cyclopentolate and 4 times and 10 times atropine groups, but We didn’t find any significant difference in cylindrical refraction between groups. It seems that 10 times instillation of atropine is still the best method of cycloplegia in pediatric eye examination.

Keywords: Cycloplegia, Atropine, Cyclopentolate, Tropicamide
نتایج

از مجموع 26 موردی که 4 مرحله ریفرنکش سیکلپلیژیک می‌باشد، در 73 مرحله جهانی مرحله کامل شد. تمام مرحله ریفرنکش، تنها اطلاعات از نتایج ریفرنکش دفعات قبل وجود داشته. نتایج درست Wilcoxon Signed را آزمون‌های SPSS و یا آزمون‌های T و rank sum مورد تحلیل قرار گرفت. نتایج استرفریک با مقایسه گروه‌های موردی، تی نیمتریک در 99 تا نتایج استرفریک و سیلووندریک مرحله سوم (مرحله آرنجی 10 نوت) مقایسه گردید.

جدول ۲- نتایج ها در 97% و 97% تفاوت نتایج استرفریک و سیلووندریک مرحله 2 و 3 با مرحله 3 (آرنجی 10 نوت)