

Combined treatment with oxybutynin and imipramine in enuresis

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Abstract

Background: Primary nocturnal enuresis is a common disorder that often leads to considerable distress in affected children and their family. In many countries pharmacologic therapy is preferred to non-pharmacologic behavioral and conditional alarm therapy. Imipramine, oxybutynin, and desmopressin have been used for enuresis with various efficacies. The aim of the present study was to compare the efficacy of imipramine, oxybutynin, and combined imipramine and oxybutynin in enuretic children aged ۶-۱۴ years old. **Methods:** In a randomized controlled study ۸۹ primary enuretic children who were otherwise normal were allocated to three groups: group A (imipramine users, n=۲۹), group B (oxybutynin users, n=۲۶), and group C (combined imipramine and oxybutynin users, n=۳۴). The number of wet nights per week during control period (۲ weeks prior treatment), and treatment period (۱ month) were compared in each group and inter groups. Also the cure rate in the treatment period and the relapse rate in the follow up period (۱ month) were compared between the three groups. **Results:** The mean ages in groups A, B, and C were ۷,۹±۱,۱ years, ۸,۲±۱,۶ years, and ۸,۲±۱,۴ years respectively. There was no significant difference in the mean ages in the three groups (P=۰,۰۳). In each group the mean number of wet nights per week decreased during treatment period compared with pretreatment period. This reduction was statistically significant (P<۰,۰۰۱ in each group). Efficacy of treatment between the three groups was compared. There was significant difference between them (P<۰,۰۰۱), but there was no significant difference between group A, and group B (P=۰,۰۶). The cure rate during treatment period was ۱۳,۷%, ۲۳%, and ۴۱% in groups A, B, and C respectively. This difference was statistically significant (P=۰,۰۴). The relapse rate during follow up period in groups A, B, and C was ۰۸,۶%, ۴۲,۳% and ۲۰,۰% respectively, revealing statistical significance (P=۰,۰۰۸) No significant adverse effects for the medications were observed. **Conclusion:** Our findings suggest that combined imipramine and oxybutynin for primary enuresis is more effective than either drug used alone. The combined therapy is recommended in enuretic children who are non-responsive to imipramine or oxybutynin alone.

Author keywords

Enuresis; Imipramine; Oxybutynin

Indexed Keywords

EMTREE drug terms: imipramine; oxybutynin

EMTREE medical terms: adolescent; article; child; clinical trial; combination chemotherapy; controlled clinical trial; controlled study; drug efficacy; female; follow up; human; major clinical study; male; monotherapy; nocturnal enuresis; randomized controlled trial; recurrence risk; treatment outcome

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