

http://journalrip.com

DOI: 10.15171/jrip.2017.49

Journal of Renal Injury Prevention



Comparing the efficacy of desmopressin and oxybutynin combination therapy and desmopressin monotherapy in children with primary nocturnal enuresis; a randomized clinical trial



Yalda Ravanshad¹, Anoush Azarfar², Afshin Ghalegolab-Behbahan³, Fakhrosadat Mortazavi³, Sonia Ahmadzadeh⁴, Fereshteh Ghorat⁵, Samira Foji⁶, Elham Iziy^{5,7}, Marjan Vejdani^{8*}

- ¹Clinical Research Development Center, Ghaem Hospital, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
- ²Department of Pediatrics, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
- ³Department of Pediatrics, Pediatrics Health Research Center, Tabriz University of Medical Sciences, Tabriz, Iran
- ⁴Department of Pediatrics Nephrology, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran
- ⁵Traditional and Complementary Medicine Research Center, Sabzevar University of Medical Sciences, Sabzevar, Iran
- ⁶Faculty Member School of Paramedical, Sabzevar University of Medical Sciences, Sabzevar, Iran
- ⁷Department of Biology, Faculty of Sciences, Islamic Azad University, Sciences and Researches Branch, Tehran, Iran
- ⁸Iranian Research Center on Healthy Aging, Sabzevar University of Medical Sciences, Sabzevar, Iran

ARTICLE INFO

Article Type: Original

Article History:

Received: 9 December 2016 Accepted: 10 May 2017 Published online: 4 June 2017

Keywords:

Desmopressin Oxybutynin Primary nocturnal enuresis

ABSTRACT

Introduction: Nocturnal enuresis is known as the most common developmental problems of childhood which has often a familial basis. It is usually benign and gradually disappears with age.

Objectives: This study was conducted on children with primary nocturnal enuresis to compare the efficacy of desmopressin and oxybutynin combination therapy with desmopressin monotherapy.

Patients and Methods: This clinical trial was conducted on 59 patients (age range; 5 to 15 years) with primary nocturnal enuresis who had referred to our center in Tabriz in 2012. The participants were divided into two groups as group 1 (30 participants) and group 2 (29 subjects). For three months, one group received desmopressin and oxybutynin and the other group received desmopressin alone. Descriptive statistics (mean \pm SD and frequency) and chi-square test was conducted.

Results: In the group treated only with desmopressin, 72.4% of the participants were completely cured in 1 month and 44.8% in 3 months. In the group treated with combination of desmopressin and oxybutynin, 83.34% were cured in 1 month and 86.7% in 3 months.

Conclusion: Desmopressin and oxybutynin combination therapy is more effective than desmopressin monotherapy for treating children with enuresis.

Implication for health policy/practice/research/medical education:

Desmopressin and oxybutynin combination therapy is more effective than desmopressin monotherapy for treating children with enuresis.

Please cite this paper as: Ravanshad Y, Azarfar A, Ghalegolab-Behbahan A, Mortazavi F, Ahmadzadeh S, Ghorat F, et al. Comparing the efficacy of desmopressin and oxybutynin combination therapy and desmopressin monotherapy in children with primary nocturnal enuresis; a randomized clinical trial. J Renal Inj Prev. 2017;6(4):259-263. DOI: 10.15171/jrip.2017.49.

Introduction

Enuresis refers to involuntary urination during night sleep which happens in children older than 5 years old. The prevalence of nocturnal enuresis is 15% to 20% in 5-year-old children, which decreases to 1%-2% until the age of 15

years old (1). Nocturnal enuresis is more common in boys than girls (2) and it has two types; (a) Primary nocturnal enuresis which exists since birth; (b) Secondary nocturnal enuresis in which a patient has no nocturnal enuresis at least in the last six months (3).

