

Prevalence of Primary and Secondary Enuresis and Efficacy of Behavioral Therapy in Boys Aged 8 to 16 Years in a Residential Hostel : A Study

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Abstract

The study was conducted as a two month project under Indian Council of Medical Research (ICMR), in which students from Pravaranagar Public School, Pravaranagar, in the age range of 8-16 years were screened for complaints of enuresis. Following complete medical analysis, the students and their parents were counseled. A study group was formed and baseline assessment on it was undertaken for one week, which was followed by three weeks of behavioral therapy. Final assessment showed that 2 students (6.45%) reported 75% remission and 1 student (3.22%) reported 50% remission of symptoms.

Introduction

Enuresis in Greek means 'to make water'. Defined by American Psychiatric Association Diagnostic and Statistical Manual, 1994 (DSM-IV), it is a disorder associated with involuntary or intentional voiding of urine in absence of infective, surgical or any other physical cause, after chronological age off five years. Enuresis in growing children has an impact on self esteem and other aspects of psychological development. This can affect the child's family and future. Although a large number of such studies have been carried out in western countries, very few studies have been undertaken in India. According to DSMIV (2294), it is classified as:

1. Primary : No continence for more than 1 year.
2. Secondary : Continence for more than 1 year and lost.

Prevalence

1. Isle Wright study : 15.2% boys enuretic less than a week and 6.7% enuretic at least once a week.
2. New Zealand study and Scandinavian study : 10% children up to age of 6 years.
3. American Psychiatric Association :
 - (a) At age five : 7% boys and 3% girls.
 - (b) At age ten : 3% boys and 2% girls.
 - (c) Adolescent : 1%

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Aims and objectives

1. To establish prevalence of primary enuresis and secondary enuresis among boys in age 8-16 years in residential hostel.
2. To establish efficacy of behavioral therapy in treatment of these boys.
3. To establish efficacy of imipramine and behavioral therapy in treatment of boys who have not responded to behavior therapy alone.

Material and Methods

1. The study was conducted in Pravaranagar Public School, Pravaranagar, District Ahmednagar, Maharashtra, under Department of Psychiatry, Rural Medical College, Loni, Dist. Ahmednagar, Maharashtra.
2. Period of study was from 07 June 2005 to 26 July 2005.
3. Approval of protocol for the study was obtained from Ethics Committee, Rural Medical College, Loni. Approval was also obtained from the School authorities.

Study design

The study was an open ended prospective study. It was divided into the three following stages.

Phase I : Baseline assessment : A chart was maintained for 1 week to understand maturity of the problem.

Phase II : Implementation of behavioral management programme for three weeks.

Phase III : Students responding completely were continued on the same therapy. Others were started on

oral imipramine tablets coupled with behavioral therapy. Imipramine was administered initially in a dose of 12.5 mg/day and titrated up to 37.5 mg/day. A statistical analysis was carried out and students responding to imipramine were continued with the same drug.

Statistical analysis : SSPS - Version 10 package was used.

Result

1. At the end of three weeks, 71% students showed complete remission by behavioral therapy alone.
2. Complete remission was achieved in 90.32% at the end of the study.
3. Out of the remaining 3 students, two (6.45%) reported at end of study.
4. One student (3.22%) reported 50% remission of symptoms.

Conclusion

This study reaffirms observations of various studies carried out in the past and portrays that behavioral therapy with or without pharmacotherapy is an effective way of treating enuresis and can be followed in routine practice.

References

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