

REFERENCES

1. Mikkelsen E.J. Functional enuresis. In : Kaplan H.I. and Sadock B.J. (eds) Comprehensive textbook of psychiatry, 1995 : 2337. William & Wilkins , Baltimore.
2. Rutter M. Isle of Wight revisited : twenty-five years of child psychiatric epidemiology. Journal of the American Academy of Child and Adolescent Psychiatry 1989 ; 28-633.
3. Jarvelin M.R., Viikainen-Tervonen L., Moilanen I. and Huttunen N.P. Enuresis in seven year-old children. Acta Paediatrica 1988 ; 77 : 148.
4. Fergusson D.M., Horwood L.J. and Shannon F.T. Factors related to the age of attainment of nocturnal bladder control : An 8-year longitudinal study. Pediatrics 1986 ; 78 : 884.
5. Rutter M., Yule W., and Graham P.J. Enuresis and behavioral deviance : some epidemiological consideration. In : Kolvin I., Mackeith R. and Meadow S.R. (eds). Bladder Control and Enuresis 1973 : 137-47.
6. Verhulst F.C., Van Der Lee J.H., Akkerhuis G.W., Sanders-Woudstra J.A.R., Timmer F.C., and Donkhorst I.D. The prevalence of nocturnal enuresis : do DSM III criteria need to be changed ? A brief research report. Journal of Psychology 1985 ; 26 : 989-93.
7. Kaffman M. and Elizur E. Infants who become enuretics. A longitudinal study of 161 kibbutz children. Monograms of the Society into Research in Child Development 1977 ; 42 : 170.
8. Moffatt M.E.K., Kato C., and Pless I.B. Improvements in self-concept after treatment of nocturnal enuresis : randomized controlled trial. Journal of Pediatrics 1987 ; 110 : 647-52.
9. Cohen M. Enuresis. Pediatric Clinic of North America 1975 ; 22 : 545-60.

10. Foxman B., Valdez R.B. and Brook R.H. Childhood enuresis : prevalence , perceived impact , and prescribed treatment. Pediatrics 1986 ; 77 : 482-7.
11. Fournier J., Gartinkel B., Bond A., Beauchesne H., and Shapiro S. Pharmacological and behavioral management of enuresis. Journal of the American Academy of Child and Adolescent Psychiatry 1987 ; 26 : 849-53.
12. Forsythe W.I. and Butler R.J. Fifty years of enuretic alarm. Archives of Disease in Childhood 1987 ; 64 : 885-97.
13. Turner R., Young G. and Rachman S. Treatment of nocturnal enuresis by conditioning techniques. Behavior Research and Therapy 1970 ; 8 :367-81.
14. Kaewpornsawan T. and Ariyanuchitkul S. A study in Thai enuretic patients treated in Department of psychiatry , Siriraj hospital. Siriraj Gaz 1994 ; 46 : 539-44.
15. Kolvin I., Tauch J., Currah J., Garside M.F., Nolan J., and Shaw W.B. Enuresis : a descriptive analysis and controlled trial. Developmental Medicine and Child Neurology 1972 ; 14 : 715-26.
16. Essen J. and Peckham C. Nocturnal enuresis in Childhood. Developmental Medicine and Child Neurology 1976 ; 18(5) : 577-89.
17. Doleys D.M. Behavioral treatments for nocturnal enuresis in children : a review of the recent literatures. Psychological Bulletin 1977 ; 84 : 30-54.
18. Berg I., Forsythe I. and Mc Guire R. Response of bed-wetting to the enuresis alarm. Influence of psychiatric disturbance and maximum functional bladder capacity. Archives of Disease in Childhood 1982 ; 57(5) : 394-6.
19. Wagner W., Johnson S.B., Walker D., Carter R. and Wittner J. A controlled comparison of two treatments for nocturnal enuresis. Journal of Pediatrics 1982 ; 101(2) : 302-7.
20. Dische S., Yale W., Corbett J. and Hand D. Childhood nocturnal enuresis : factors associated with outcome of treatment with an enuresis. Developmental Medicine and Child Neurology 1983 ; 25(1) : 67-80.

21. Cracco A., Belloli G.P. and Ronconi G.F. Sound alarms and conditioning therapy in the treatment of childhood enuresis : a study of 180 cases. Pediatria Medica & Chirurgica 1984 ; 6(5) : 681-9.
22. Houts A.C., Peterson J.K. and Liebert R.M. The effect of prior imipramine treatment on the results of conditioning therapy in children with enuresis. Journal of Pediatric Psychology 1984 ; 9 : 505-9.
23. Bartolozzi G., Savino B., Calzolari C., Danti D.A. Riciardi R. and Ceretelli P. Treatment of nocturnal enuresis with a sound alarm. Study of 130 cases. Pediatria Medica & Chirurgica 1985 ; 7(1) : 115-20.
24. Yachiku S., Kaneko S., Kurita T. and Yachiku S. A study of conditioning treatment of nocturnal enuresis by buzzer alarms. Hinyokika Kivo-Acta Urologica Japanica 1989 ; 35(4) : 594-601.
25. Geffren G., Johnson S.B. and Walker D. Behavioral interventions for childhood nocturnal enuresis : the differential effect of bladder capacity on treatment progress and outcome. Health Psychology 1986 ; 5(3) : 261-72.
26. Willes S. Comparison of desmopressin and enuresis alarm for nocturnal enuresis. Archives of Disease in Childhood 1986 ; 61(1) : 30-3.
27. Stromgren A. and Thomsen P.H. Personality traits in young adults with a history of conditioning-treated childhood enuresis. Acta Psychiatrica Scandinavica 1990 ; 81(6) : 538-41.
28. Devlin J.B. and O' Cathain C. Predicting treatment outcome in nocturnal enuresis. Archives of Disease in Childhood 1990 ; 65(10) : 1158-61.
29. Thomsen P.H. and Stromgren A.S. Dry bed--but how? A follow-up study of children with enuresis treated with a bed alarm. Ugeskrift for laeger 1991 ; 153(15) : 1063-5.

30. Bartolozzi G., Boldrini A., Salmeri A. and Vitali E. Evaluation and treatment of the enuretic child : eight years experience. Pediatria Medica & Chirurgica 1991; 13(4) : 389-93.
31. Van Londen A., Van Londen-Barentsen M.W., Van Son M.J. and Mulder G.A. Arousal training for children suffering from nocturnal enuresis : a 2 1/2 years follow-up. Behavior Research and Therapy 1993 ; 31(6) : 613-5.
32. Bonde H.V., Andersen J.P. and Rosenkilde P. Nocturnal enuresis : change of nocturnal voiding pattern during alarm treatment. Scandinavian Journal of Urology and Nephrology 1994 ; 28(4) : 349-52.
33. Rappaport L. Pronostic factors for alarm treatment. Scandinavian Journal of Urology and Nephrology 1997 ; 183 : 55-7.
34. Butler R., Brewin C. and Forsythe I. Relapse in children treated for nocturnal enuresis : Prediction of response using pre-treatment variables. Behavioral Psychology 1990 b ; 65 : 72.
35. Fielding D. Factors associated with drop out, relapse and failure in the conditioning treatment of nocturnal enuresis. Behavioral Psychology 1985 ; 13 : 174-85.
36. Young G.C. and Morgan R.T. Analysis of factors associated with the extinction of a conditioned response. Behavior Research and Therapy 1973 ; 11(2) : 219-22.
37. Turner R.K. and Taylor P.D. Conditioning treatment of nocturnal enuresis in adults : preliminary findings. Behavior Research and Therapy 1974 ; 12(1) : 41-52.
38. Cochat P. and Gerard C. Treatments of enuresis. Revue du Praticien 1991 ; 41(23) : 2302-5.
39. Steele BT. Nocturnal enuresis. Treatment options. Canadian Family Physician 1993 ; 39 : 877-80.
40. Moffatt M.E., Harlos., Kirshen A.J. and Burd L. Desmopressin acetate and nocturnal enuresis : how much do we know ? Pediatrics 1993 ; 92(3) : 420-5.

41. Ankjaer - Jensen A. and Sejr T.E. Costs of the treatment of enuresis nocturna. Health economic consequences of alternative methods in the treatment of enuresis nocturna. Ugeskrift for Laeger 1994 ; 156(30) : 4355-60.
42. Ng K.H. Nocturnal enuresis. Singapore Medical Journal 1994 ; 35(2) : 198-200.
43. Kreitz B.G. and Aker P.D. Nocturnal enuresis : treatment implication for the chiropractor. Journal of Manipulative and Physiological Therapeutics 1994 ; 17 (7) : 465-73.
44. Monda J.M. and Husmann D.A. Primary nocturnal enuresis : a comparison among observation , imipramine , desmopressin acetate and bed-wetting alarm system. Journal of Urology 1995 ; 154(2) : 745-8.
45. Alon U.S. Nocturnal enuresis. Pediatric Nephrology 1995 ; 9(3) : 94-103.
46. Schmitt B.D. Nocturnal enuresis. Pediatric in Review 1997 ; 18(6) : 183-90.
47. Gimpel G.A., Warzak W.J., Kuhn B.R. and Walburn J.N. Clinical perspectives in primary nocturnal enuresis. Clinical Pediatrics 1998 ; 37(1) : 23-9.
48. Hansen A.F. Alarm treatment : influence on functional bladder capacity. Scandinavian Journal of Urology and Nephrology. Supplementum 1997 ; 183 : 59-60.
49. Oredsson A.F. and Jorgensen T.M. Changes in nocturnal bladder capacity during treatment with the bell and pad for monosymptomatic nocturnal enuresis. Journal of Urology 1998 ; 160(1) : 166-9.
50. Oxman A.D. and Guyatt G.H. A consumer's guide to subgroup analysis. Annual Internal Medicine 1992; 116 : 78-84.

Appendices

ตารางประเมินผล การรักษา ปัสสาวะระดับที่นอน

ชื่อ นามสกุล

อายุ ปี เพศ ID

	คืนที่ 1	2	3	4	5	6	7
มีปัสสาวะระดับที่นอน							
ขนาดเส้นผ่าศูนย์กลาง ของรอยเปื้อน (ซม.)							

	คืนที่ 8	29	10	11	12	13	14
มีปัสสาวะระดับที่นอน							
ขนาดเส้นผ่าศูนย์กลาง ของรอยเปื้อน (ซม.)							

ตารางการรักษาปัสสาวะรถที่นอน I

ชื่อ นามสกุล

อายุ ปี เพศ ID

	คืนที่ 1	2	3	4	5	6	7
ปลูกดื่น							
เวลาที่ดื่น							
ตัวเลขที่ให้จำ							
ตัวเลขที่เด็กจำได้							

	คืนที่ 8	9	10	11	12	13	14
ปลูกดื่น							
เวลาที่ดื่น							
ตัวเลขที่ให้จำ							
ตัวเลขที่เด็กจำได้							

ตารางการรักษาปัสสาวะระดับอนุ II

ชื่อ นามสกุล

อายุ ปี เพศ ID

	คืนที่ 1	2	3	4	5	6	7
ใช้เครื่องหรือไม่							
คืน							
เวลาที่ดื่น							
ตัวเลขที่ให้จำ							
ตัวเลขที่เด็กจำได้							

	คืนที่ 8	9	10	11	12	13	14
ใช้เครื่องหรือไม่							
ปลูกดื่น							
เวลาที่ดื่น							
ตัวเลขที่ให้จำ							
ตัวเลขที่เด็กจำได้							

Table for evaluating the result of treatment

Name _____ Surname _____
 Age _____ Sex _____ ID _____

	Night 1	2	3	4	5	6	7
nightwetting							
diameter of urine mark							

	Night 8	9	10	11	12	13	14
nightwetting							
diameter of urine mark							

Table for enuresis treatment I

Name _____ Surname _____

Age _____ Sex _____ ID _____

	Night 1	2	3	4	5	6	7
wakening							
wakening time							
digits told							
digits remembered							

	Night 8	9	10	11	12	13	14
wakening							
wakening time							
digits told							
digits remembered							

Table for enuresis treatment II

Name _____ Surname _____

Age _____ Sex _____ ID _____

	Night 1	2	3	4	5	6	7
use the device							
wakening							
waken time							
digits told							
digits remembered							

	Night 8	9	10	11	12	13	14
use the device							
wakening							
waken time							
digits told							
digits remembered							

QUESTIONNAIRES

ID.....

Name.....

Address.....

Telephone.....

PART I : Demographic data

1. Age : Years

2. Sex : () male () female

3. Marital status : () never married

() married times

() current status () live together

() separated

() divorced

() widowed

number of childrenpersons

4. Religion : () Buddhism

() Christ

() Islam

- () Hindu
() Others, specify.....

5. Occupation : () government officer
() business
() employee
() argriculturist
() other, specify.....
() unemployed

6. Education : () elementary
() secondary
() occupational education
() high degree occupation education
() bachelor degree
() higher
() other, specify.....

7. Income : () enough () with saving () without saving
() not enough () with debt () without debt
average income of householdbaht/month

8. Number of members stay in the house.....persons

9. Do you have any knowledge about nocturnal enuresis ?

() yes

() no

10. Has/Have your child/children the problems of bedwetting ?

() yes, how many persons have this problem ?

..... Persons

() no

PART II : Bedwetting of your child/children

1. How old is the child now ? Years

2. Has the child still been incontinent ?

() yes

() no, he/she has been continent at years old

3. The average of urinations per night

4. The average of wetnights per week

5. If the child is still incontinent, when did it start ?

() when he/she was a baby

() at he was.....years old

6. Had the child ever been dry for a long period of more than 1 year ?

() yes, he/she wasyears old

() no

7. Has the child any day-time wetting ?

() yes

() no

8. Frequency of urinations day : night = : :

9. Has the child received any treatment before ?

() yes, by the method , specify

when

result

() no

11. How do you do when the child has bed wetting ?

() do nothing

() wake him/her up

() restrict fluid for his/her drinking

() others, specify.....

Name _____ Sex _____ Age _____

Address _____

Telephone _____

Father's name _____ Age _____ Career _____ Education _____

Mother's name _____ Age _____ Career _____ Education _____

1. Treatment _____

2. Number of urinations per night before treatment _____

Number of wetnights per week before treatment _____

3. Type of wakening _____

4. Result of treatment

- remission
- much improve
- improve
- not improve

5. Duration of treatment _____

6. Number of days taken to reach remission _____

Number of wetnights before reaching remission _____

7. Relapse _____

8. Satisfaction score of parent for the method of treatment (VAS) _____

9. Others _____

VITAE



Mrs. Titawee Kaewpornsawan was born on 28 June 1959, in Bangkok, Thailand. She graduated as Medical Doctor (2nd honor) from Siriraj Hospital, Mahidol University in 1985. In 1989 she got a Thai Board of General Psychiatry from Siriraj Hospital, Faculty of Medicine, Mahidol University and in 1991, a Diplôme Interuniversitaire de Spécialisation Complémentaire de Psychiatrie de l'enfant et de l'adolescent from University of Paris V, France and a Diplôme Universitaire de Psychopathologie du Bebe from University of Paris XIII, France. Since 1995 she has been a member of the Society of Child and Adolescent Psychiatry of France. She has been enrolled in the Master Degree of Science in Health Development at the Faculty of Medicine, Chulalongkorn University since 1996. Her present position is Assistant Professor at the Department of Psychiatry, Faculty of Medicine, Siriraj Hospital, Mahidol University.