263

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DEMYSTIFICATION OF TREATMENT FAILURES IN CHILDREN WITH INCONTINENCE OR NOCTURNAL ENURESIS

Aims of Study

Treatment failures in incontinent and / or nocturnal enuretic children are a wide-spread problem and usually assigned to specialized management (1). Therefore the aim of this retrospective study was to prove whether children with treatment failures evaluated and treated in a referral center can be cured, thus avoiding specialized management.

Methods

Solitary or multiple treatment failure patients of other consultants, referred to the first author´s unit, were re-evaluated, diagnosed and treated accordingly. The main prior treatment modalities from outside consultants comprised enuresis alarm, DDAVP, psychotherapy, imipramine and anticholinergics.
All children were assessed clinically according to the criteria of the ICI (2) by history, frequency-volume-charts over a period of two weeks, urinalysis, ultrasound and at least two EMG-uroflows. Nocturnal diuresis volume was calculated by diaper weight plus first micturition.
In cases of urinary incontinence a combination treatment algorithm as reported earlier (3) was applied. This consisted of a four week first treatment period with propiverine (0.4 mg bid/kg b.w., 5 mg coated tablet for use in children), combined in the second treatment period with individualized further therapy (alpha-blocker (4), DDAVP (5), or biofeedback (6)). Outcome evaluation was the achievement of continence.
In cases of nocturnal enuresis urotherapy (7) was applied for two weeks encompassing timed drinking and modifying micturition habits. Non-responders then were assigned to DDAVP monotherapy. In partial responders an individualized therapy (anticholinergics (5), biofeedback (6), alpha-blocker (4), enuresis alarm (8) or psychotherapy) was combined with DDAVP later on as reported elsewhere (9).
Outcome was the relief of bedwetting.

Results

138 treatment failures in 126 children (1997 – 2002) were referred to the first author's center. The childrens' conditions were assessed and the active therapies comprised enuresis alarm (n=69), DDAVP (n=25), psychotherapy (n=18) or imipramine (n=7) and anticholinergics (n=19).
Demographic characteristics: 38 girls, 88 boys, age range 5 – 17 years.
Re-evaluation resulted in the following diagnoses: 45 cases of urinary incontinence and 93 cases of nocturnal enuresis assigned to the proposed treatment algorithms for urinary incontinence and nocturnal enuresis according to their individual symptoms. These treatment strategies resulted in 107 complete responders, 29 partial and 2 non-responders.

Conclusions

Our retrospective analysis underlines the necessity of precise assessment of symptoms. The above mentioned distinct combination treatment strategies lead to a high success rate (77.5 % complete and another 21 % partial responders) leaving only 1.5 % non-responders for specialized management.
This study confirms the results reported in the referred studies on the treatment algorithms from these authors based on their own patient population. The fact that comparable success rates are achievable in patients who failed earlier treatment by outside physicians proves that no significant patient selection bias existed.

References

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