NOCTURNAL ENURESIS IN CHILDREN

Most children stop wetting their beds between 2 and 4 years of age. It does not mean that persistent bedwetting after 4 indicates an abnormality. An organic disorder is rarely found in enuretic children (i.e., children who are bedwetting after the age of 5).

Bedwetting after age 5 years is more common in boys, in children from large families, and in children from lower socioeconomic groups, and it occurs more commonly in families where one of the parents may have been a bedwetter. Nocturnal enuresis occurs once a month or more in 8% of school-age children.

When bedwetting recurs after a period of dryness (termed regressive or secondary enuresis), an explanation should be sought. The polyuria of diabetes mellitus may frequently present in this way. Urinary tract disease and diabetes insipidus must be rules out.

Age by which Bedwetting Stopped

	BOYS		GIRLS	
Age	Caucasian (%)	African-American(%)	Caucasian(%)	African-American(%)
< 2	28	37	37	35
2-3	70	73	80	77
4-5	85	83	89	90
6-7	91	89	92	92

There is a relative constancy to the percentage of children who spontaneously remit from their enuresis each year. The figure to remember is that any one child during the course of 1 year has about a 15% chance of this problem going away by itself. Thus, a child who wets his bed at age 5 will have about a 3% chance of bedwetting by age 20. These figures apply only to the natural history of bedwetting and not to those children whose bedwetting is related to an environmental factor.

Percentage Spontaneously Ceasing Bedwetting per Year

Ages	**5-9**	**10-14**	**15-19**
Percentage	**14**	**16**	**16**

Diurnal or daytime enuresis occurs much less frequently than nocturnal, with an incidence of less than 1% in a 7-to 12-year-old group.

ENURESIS

COMMON CAUSES

"Busy little girl" syndrome: holding urine to the last moment
Developmental delay of bladder function and capacity
Giggle incontinence
Psychological

UNCOMMON CAUSES

Diabetes mellitus
Emotional stress
Food allergy
Obstructive abnormalities of the urinary tract
Stress incontinence
Urge syndrome
Urinary tract infections

RARE CAUSES

Compulsive water drinking
Diabetes insipidus, central or nephrogenic
Lumbosacral anomalies
Ectopic ureter
Labial fusion
Sickle cell anemia
Spinal cord tumors

Daytime Wetting

Parents often consult a pediatrician about their child's daytime "accidents." In general, 3-4% of children between 4 and 12 years of age experience daytime wetting. About 50-60% of these children have nocturnal enuresis. In contrast, only 8% of children with nocturnal enuresis have daytime wetting. By far, the most common cause of daytime wetting is micturition deferral. In this common situation, the child may be distracted during play or some other preoccupation and hold urine until the last minute, leading to the unsuccessful dash to the toilet so familiar to parents. Although this behaviour may be the most common cause of daytime wettings, other medical causes should be considered if problems persist.

Medical Problems That May Cause Daytime Wetting

Urinary tract infection
Chemical urethritis (most commonly in girls; from bubble bath use)
Stress incontinence
Emotional stress or excitement
Neurogenic bladder

Constipation
Vaginal reflux of urine (in girls who do not open the labia with voiding)
Postvoid dribble syndrome (most often often girls aged 4-6 years
Daytime frequency syndrome (described in boys aged 3-11 years)
Giggle incontinence
Urge syndrome (may commonly be associated with vesicoureteral reflux, and possibly with UTIs)
Urethral obstruction
Ectopic ureter
Diabetes mellitus
Diabetes insipidus

INVESTIGATIONS :

CBC , Urine Screen, X-ray of DL spine, USG of Genito Urinary Tract, Specific Radiological – Nuclear Medicine studies, Aerodynamic Studies amongst others.

TREATMENT:

No single therapeutical plan is ideal for all children. Simple measures like fluid restriction, avoiding aerated drinks, prebed voiding etc. are often useful.

Specific measure like bladder training exercises, behavior modification & motivation of therapy are also useful.

Pharmacotherapy includes anticholinergic drugs like Oxybutinin etc., DDAVP etc.

Drug Therapy should be under strict Medical Supervision.