ABSTRACT:
Enuresis is a common menace that create a lot of stress among parents and the children. It is a Greek Word that means “to void urine “. It can occur either in daytime or in night. As per ICCS (International children’s Continence Society”) enuresis is defined as ‘Involuntary loss of urine by day or night or both. In a child aged 5Yrs or older; in the absence of congenital or acquired defects of the nervous system or urinary tract. The investigation related to enuresis is of minimal value. The treatment mainly depends upon type of enuresis and patient compliance.
Enuresis is associated with emotional distress in both children and parents, which is reversible once the children become dry. Most of the cases of enuresis in our day to day practice in OPD are benign without associated anatomic, neurologic or behavioural Abnormalities.
In order to evaluate enuresis, it is important to know whether the child wet the bed at daytime or during night time. It is also worthy to note whether it is primary or secondary enuresis.
Enuresis has been classified as follows:-

CLASSIFICATION OF ENURESIS:
A. Monosymptomatic
1) Night time wetting
2) No bladder Dysfunction.
3) No daytime symptoms of the following.
   • Urgency
   • Leakage or wetting
   • Hesitancy
   • Frequency
   • Pain
   • Sensation of incomplete emptying.

B. Nonmonosymptomatic
1) Daytime wetting.
2) Night time wetting possible.
3) Daytime symptoms of the following.
   • Urgency.
   • Leakage or wetting.
   • Hesitancy.
   • Frequency.
   • Pain.
   • Sensation of incomplete emptying

C. Bladder dysfunction
1) Emptying Abnormality
2) **Storage Abnormality**

Enuresis can also be classified as primary enuresis and secondary enuresis.

1) **Primary enuresis** occurs when a child has never been dry for 6 months.

2) **Secondary enuresis** is when a child has been dry for more than 6 months starts to meet.

It is to be kept in mind that the children with developmental delay and until 5yrs age is not considered enuresis or till they reach the cognitive level of a 4 year old.

**Monosymptomatic Enuresis:**

The incidence of monosymptomatic enuresis is approximately 10% to 15% of 7 year old. A child having MSE will have history of not being dry on more than 2 consecutive nights. Infact they urinate more in night (nocturnal polyuria). This is thought to be due to change in vasopressin secretion. The other factors that contribute to MSE is ADHD (Attention deficit/Hyperactivity Disorder) and OSA (obstructive sleep Apnea), Developmental delay.

**Non-monosymptomatic Enuresis:**

A child NMSE has habit of day time wetting. This type of enuresis is common among children with ADHD (Attention deficit/ Hyperactivity Disorder).

**EVALUATION:**

1) History should be asked about the age of toilet training for both bladder and stool.

2) Similar family history.

3) A history of bowel habits should be obtained to determine of constipation or encopresis present or not.

4) Sleep pattern.

5) A dietary history.

6) Volume of fluid each day consumed.

7) Elucidate any sign of D.M.

8) Rule out pollakiuria (extremely frequent voiding seen children between Age 3 and Age 8 yrs without daytime urine continence) are not considered enuresis.

9) Physical Examination should be asked for general cognitive level/ ability.

An evaluation of muscle strength, sensation, deep tendon reflexes, tone, absence or presence of Babanski reflex should be asked.

**TREATMENT:**

(A) **Drugs**

1) **DDAVP (Desompressin)**

   - 0.2 - 0.6 mg QHS orally.
   - give half before bed time.
   - Duration upto 9 hrs
   - Avoid with illness and risk of dehydration.
   - Side effect includes hyponatremia and water intoxication.
   - Approved for children older than age 6yrs.

2) **Oxybutynin**

   - 5-15 mg BD for short acting form
5-15 mg daily for extended approved for solution for children Age 6 yrs.

(3) Impiramune
- 25 -50 mg orally QHS (for children younger than Age 12 yrs.)
- Upto 75 mg orally QHS (for > 12 yrs )
- Side effect Hypotension, Anxiety, increased appetite
- Avoid monoamine oxidase inhibitors

(4) Doxazosin
- 0.5 mg starting dose orally
- Increase to 1mg over 1 month
- Use in older children
- Side effect – hypotension / blurred vision, dizziness, fatigue

(B) Alarm therapy

REFERENCES: