INCONTINENCE

Urinary incontinence can be described as the involuntary loss of urine at any time. The evaluation of urinary incontinence, and other urogynecologic problems, involves the assessment of multiple symptoms and objective findings with subsequent formation of an overall impression. The more complex the problem, the more important objective testing becomes in the evaluation of the patient. Although mixed-incontinence symptoms alone are a poor predictor of the type of incontinence, objective testing should include a through and detailed history. The historical data should include:

1. The impact of the urine loss upon the patient's life, socially and personally
2. Indicators of stress incontinence or bladder instability
3. Past urologic evaluations, treatment measures, and previous pelvic surgery
4. Medical diagnoses or medications that may be effecting the urinary tract
5. Cognitive level and capacity

If the patient feels her urine loss is a significant problem for her, additional evaluation and treatment is appropriate.

The pure symptom of nonsustained, immediate urine loss with coughing, laughing, and sneezing is predictive of stress incontinence. Spontaneous complete bladder emptying and true nocturnal enuresis are rare and more predictive of bladder instability. If the patients had a predominant complaint of stress incontinence, a positive stress test, a residual volume of less than 50 cc, and a functional bladder volume of 400cc, stress incontinence was confirmed in 94 percent of patients. Only 15% of the stress-incontinent patients also had objective detrusor instability.

Incontinence may also be associated with medical problems. Diabetes may result in a propensity to develop urinary tract infections or may result in sacral neuropathy with resultant bladder effects. Chronic coughing may cause an asymptotic patient to be symptomatic. Multiple sclerosis, Parkinson's disease, or cerebral vascular accidents may result in incontinence. Certain medications may inhibit bladder emptying and result in overflow incontinence.

Examination should include these assessments as a minimum:

1. Degree of pelvic floor relaxation and vaginal descent
2. Degree of urethrovesical junction descent with straining
3. Vaginal integrity and estrogenization
4. Bimanual and rectal examination to rule out pelvic mass and to assess anal sphincter tone.
5. Neurologic examination of the perineum and lower extremities
6. The amount of urine loss on stress testing.

Standing exam: The patient must have a full bladder. The patient stands over a pad with a wide stance as the examiner looks for evidence of prolapse with straining and coughing. A patient is asked to do one then two then three hard coughs in a row. If the urine loss is immediate, this is indicative of stress incontinence. If the urine loss is delayed by 2-3 seconds, this is indicative of bladder instability.

Standing exam: This is used for the neurologic exam. It is important to assess reflexes and sensitivity of the lower extremities to identify possible nerve damage. This can indicate possible nerve damage as a reason for incontinence.

Supine examination: The patient is asked to empty her bladder. She is then placed in the dorsal lithotomy position. A cotton swab is used to test fine-touch sensation in the saddle area. Pinprick and dullness are also tested in the same area. Various reflexes are tested to insure that the nervous system is intact. An assessment is also made to identify the integrity of the vaginal wall and pelvic structures. The examiner will identify rectocele, cystocele, or uterine prolapse.

CONSERVATIVE TREATMENT OF URINARY INCONTINENCE

See instruction on Kegal exercises.

SURGICAL TREATMENT OF STRESS URINARY INCONTINENCE

1. The paravaginal repair
2. The Marshall-Marchetti-Krantz procedure
3. The Burch Colposuspension
4. The Pubovaginal Sling procedure
5. The modified Pereyra procedure

BEHAVIORAL THERAPY OF DETRUSOR INSTABILITY

The goal of bladder retraining is to suppress micturition until a set time, thus regaining control of the inhibitory reflexes or abilities.
The patient voids at regular intervals and avoids entering the bathroom in the interim. The time intervals are gradually increased to a goal of 2 or 2.5 hours. With time patients will experience less frequency, less urgency incontinence, and more control of micturation. At night the patient attempts to sleep as much as possible or only void once per night. Before changing time intervals, a patient should work for one week.