

a result of a reduction of the overall inhibitory effect of descending cerebrospinal pathways in neurological disorders, but also frequently occurs in the absence of detectable neurological lesions in patients with bladder outlet obstruction, enuresis, in many women with urinary incontinence, and in many patients—both men and women—with symptoms of frequency, nocturia, urgency or urge incontinence.

The uninhibited detrusor can be detected by supine cystometry, but the additional provocative tests of passive change of posture from supine to erect, and of coughing will allow the detection of many more patients who have detrusor instability causing symptoms.

The importance of detecting detrusor instability lies in the poor results of operations for incontinence in women when abnormal detrusor function is present. As instability is associated sometimes with symptoms mimicking those due to bladder outlet obstruction, it is important to obtain objective evidence of obstruction when a patient has the symptoms of frequency, nocturia, poor stream, together with urgency and urge incontinence, since prostatectomy in the non-obstructed group is likely to aggravate the symptoms by reducing the outlet resistance.

The management of the non-neurological unstable bladder is far from simple. Correction of outlet obstruction when associated with detrusor instability will lead to a return of stable bladder function in most cases, but where instability is due to other unidentified causes, drug therapy with antispasmodics is worth trying. The place of adrenergic drugs alone or in combination with progesterone or oestrogen deserves further evaluation.

Operations designed to denervate the bladder are successful sometimes, but early success is often marred by late failure. Where routine operative measures have failed and when urodynamic studies indicate adequate sphincter function, caeco-cystoplasty deserves consideration as an alternative procedure to urinary diversion in patients who are incapacitated by urinary incontinence due to detrusor instability.

Treatment of Renal Trauma by Angiographic Injection of Autologous Clot

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Persistent haemorrhage from blunt renal trauma, with hypotension, falling haematocrit or expanding flank mass, is generally treated by surgical intervention. The first report of an alternative and perhaps preferable treatment, is presented.

A 15-year-old boy was admitted with a 1 hour history of total gross haematuria and left flank pain and tenderness, following blunt renal trauma. Admission pyelogram showed delayed function from the left kidney with blood clot in the collecting system and slight peri-ureteral extravasation. During the next 9 days of conservative management with bed rest, he continued to have gross haematuria with flank pain and required a transfusion with 4 units of blood. Further pyelography showed no improvement in the left kidney and selective renal arteriography showed several areas of bleeding from branches of the superior segmental portion of the lower of 2 renal arteries. 0.7 ml of fresh clot from the patient's own blood was

injected into this branch and created total occlusion of the superior segmental branch with cessation of bleeding and immediate clearing of the urine. Repeated selective arteriography after 5 days and at 3 months demonstrated a completely cleared, open, unoccluded renal arterial tree with only a tiny area (less than 5%) of infarction.

Experimental studies in rats by injection of relatively huge volumes of autologous clot into the renal arterial circulation revealed the same remarkable clearing phenomenon by endogenous fibrinolytic activity, and indicated a wide margin for safety in the clinical use of this technique in patients with renal bleeding.

The Urological Case Histories of Nicolas Tulp

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Nicolas Tulp of Amsterdam (1593-1616) has achieved immortality as the subject of Rembrandt's "Anatomy of Nicolas Tulp" but is less well known as a leading physician and the author of *Observationes Medicae*. This book, first published in 1641, contains in the enlarged edition of 1652, over 200 chapters among which are found the first descriptions of the ileocaecal valve and very early accounts of beriberi and many other subjects.

His urological cases are too numerous to consider in detail. Among renal calculi reported are bilateral stag-horn calculi and a stone extruded through the skin of the loin, followed by a urinary fistula. He uses these cases to assert that the suggested surgical removal of renal calculi would be of no benefit even if technically possible. A patient who died of anuria due to calculi impacted in both pelvi-ureteric junctions is regarded as beyond medical aid.

An extraordinary case is that of the clergyman who developed anuria whenever the moon was almost full. At postmortem, a hydronephrotic kidney and 2 vesical calculi were found but hardly explained his odd syndrome.

Vesical calculi are discussed, with repeated warnings of the dangers of lithotomists attempting to remove stones in diverticula. One female patient passed 300 calculi in one burst and another expelled a calculus weighing over 3 ounces without medical aid. "Worms" in the urine, resembling mites, ascarides and odd insects, were almost certainly contaminants. He also relates the famous case of Jan de Doot who removed a subcutaneous calculus from his perineum with a kitchen knife.

Other items include a very early account of Peyronie's Disease, and reports of hypospadias, hermaphroditism, an infant with an imperforate anus who passed both urine and faeces through a hypospadiac meatus, and a large urethral diverticulum full of calculi.

Two cases of bladder injury were followed by foreign bodies in the bladder: in 1, a large fragment of the pubic bone was found at postmortem and, in the other, a stone formed round a stent lost in the bladder during treatment of a penetrating wound. One remarkable case of the intermittent passage of