

Flow rate measurement

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For this to be meaningful, two or three voids should be recorded using a special flow meter, usually found in urology outpatient clinics; the voided volume should be in excess of 150–200 mL. A typical history and a flow rate <10 mL/s (for a voided volume of >200 mL; Figure 84.5) will be sufficient for most urologists to recommend treatment. Usually, a flow rate measurement will be coupled with ultrasound measurement of postvoid residual urine. There are pitfalls in the measurement of flow rates. The machine must be accurately calibrated. The patient must void volumes in excess of 150 mL and two or three recordings are needed to obtain a representative measurement. Decreased flow rates and LUTS may be seen in: BOO; low voided volumes (characteristically in men with detrusor instability); men with weak bladder contractions (low pressure–flow voiding), also known as underactive detrusor. Details of these studies are outlined in Chapter 81. They should be performed on the following patients: men with suspected neuropathy (Parkinson’s disease, dementia, longstanding diabetes, previous strokes, multiple sclerosis); men with a dominant history of irritative symptoms and men with lifelong urgency and frequency; men with a doubtful history and those with flow rates in the near normal range (\sim or >15 mL/s); men with invalid flow rate measurements (because of low voided volumes); high residual/chronic retention; men with recurrence of LUTS after previous BPH surgery (in the absence of urethral or bladder pathology); young men (<50 years) and older men (>80 years) with LUTS. -

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