

The time when urination is most frequent is in the early hours of the morning. Sleep may possibly be a strong factor in producing this apparent phenomenon. The bladder is usually emptied the last thing before retiring, and the patient at once passes into a refreshing sleep. The pain and distention does not become enough to waken him until he has slept for some hours, and consequently on awakening, his bladder is fuller than usual on account of the length of time which has passed since the last urination. By this time the distention has become great enough to waken him; the elapsed interval is much greater than during the day, and in consequence the bladder is stretched much beyond its accustomed point. This, by rendering the muscular coat tired, is the cause of the more frequent risings between this time and morning. Had the first interval not been so long, the succeeding ones would be somewhat longer.

In contradistinction to ordinary increased frequency must be distinguished the somewhat uncommon occurrence of intermittent micturition, or a sudden and complete stoppage without previous slackening. This condition can only occur when the prostatic outgrowth is in such a position that it can close the urethral passage like a valve. The hypertrophied portion may be confined to the prostatic urethra, or it may project into the urethra from either one or other of the prostatic lobes, but it must be in such a position so that, by a ball-valve action, it can suddenly and completely block the urethral opening. This sudden blocking of the vesical outlet is occasioned only by such an outgrowth, and in the presence of a forceful contraction of the bladder walls thus tightly forcing it into the urethra, or by the presence of a calculus. In either instance, the stream can be continued only after the straining has ceased and the obstruction is thus allowed to float backward.

*Difficulty in starting the stream, decrease in force, and dribbling at the end of micturition*, are three of the earliest symptoms to appear. The difficulty in commencing the act of micturition is due in the main to increased obstruction on the one hand, and a decided decrease in expulsive power on the other. The lack of expulsive power is occasioned by a complete alteration of the relationship of the structures forming the neck of the bladder. Instead of relaxing and becoming funnel-shaped, as in normal health, the neck of the bladder becomes rigid, the longitudinal fibres cannot contract, and as a consequence the prostatic urethra cannot dilate and form a portion of the bladder. Instead, then, of being filled with urine ready to pass away, the first portion of the urethra is contracted and has to be filled slowly by force from above. This sometimes takes considerable time, hence the delay and difficulty in starting the stream.

This delay in commencing the act of micturition is almost invari-