There are no recent data on the epidemiology of prostatic disease in Chinese individuals in the English-language literature. The conclusion that symptomatic prostatism is rare in Chinese was first reported by Chang and Char in 1936. Their experience at the Peiping Union Medical College Hospital is contrary to my personal experience in San Francisco, where 21% (147,426) of the city's population is of Asian ancestry.

The clinical incidence, presentation, and management of benign prostatic hyperplasia in the Chinese population is reported herein. Comparative data from the San Francisco Peer Review Organization will be discussed to elaborate on the incidence of symptomatic prostatism requiring acute hospitalization.

Incidence

The total number of Medicare program patients discharged from San Francisco hospitals was reviewed from 1979 to 1980 (Table 1). The incidence of discharge with a diagnosis of benign prostatic hyperplasia (BPH) among this population was 1.6% (1229/75,834). The racial division of patients with BPH coincided with their total relative incidence of discharges with the exception of the Asian population, where the number of patients with BPH discharged was 16%, or about twice that for all other conditions requiring hospitalization. The data suggest that the incidence of BPH in Asians requiring hospitalization in the Medicare population is about twice that expected in the overall population of hospitalized patients.

The discharge incidence from Chinese Hospital in San Francisco of patients with the diagnosis of BPH was 4% (75/1879) in 1977, 4.8% (89/1851) in 1978, 5.8% (107/1843) in 1979, and 5.9% (135/2291) in 1980. These figures clearly establish that there is a higher incidence of this disease among Chinese men than in the general population of men (1.6%) in the San Francisco area.

Among the 406 patients admitted to Chinese Hospital from 1977 to 1980 with symptomatic BPH, the associated incidence of carcinoma of the prostate was 5.7% (23/406) and of bladder stone was 4.2% (17/406).

Clinical Presentation and Management

The general symptoms of aging are well accepted by Chinese patients. The clinical features of symptomatic prostatism in 100 consecutive cases admitted to Chinese Hospital in 1976 for transurethral...
reseion (TUR) of the prostate are herein reviewed. The mean age of patients requiring TUR of the prostate was 74 years (range 54–89 years). Most of the reasons for hospitalization were not obstructive voiding symptoms of decreasing urinary stream and force, dribbling, and nocturia; rather, they comprised associated medical complications of obstructive prostatism resulting in gram-negative sepsis, hypervolemia with congestive heart failure, pulmonary edema, and associated chronic renal failure due to bilateral hydroureteronephrosis. Forty-eight percent of the patients were admitted with the combined medical complications that are associated with longstanding urinary retention. This group of patients did not complain of obstructive voiding symptoms to their primary physicians but required hospitalization for their acute medical illness. However, upon questioning by the urologic consultant prior to TUR of the prostate, all patients admitted to having severe voiding symptoms (due to bladder outlet obstruction) for the 2 years prior to the immediate medical insult. Such symptoms were considered by most patients to be normal and acceptable for their age.

Thirty-five percent of the patients were admitted for TUR of the prostate due to obstructive voiding symptoms of greater than 6 months’ duration (average 18 months). The most common voiding symptom that brought the patient for urologic evaluation was nocturia greater than three times per evening. This latter group of patients had associated symptoms of decreasing urinary stream and force, terminal dribbling, and/or urgency or overflow incontinence.

Seventeen percent of the patients were hospitalized for acute urinary retention and associated complications of hypervolemia. This latter group had longstanding significant obstructive voiding symptoms prior to their immediate hospitalization but did not obtain care or advice from their primary physician prior to the development of acute urinary retention.

Excretory urography and cystoscopy were performed on all patients. Massive hydroureteronephrosis was noted in two patients with azotemia and overflow urinary incontinence; the other 98% had normal upper urinary tracts. The lower urinary tracts demonstrated bladder trabeculation with severe (>250 cc) residual in 35%, moderate (100–150 cc) residual in 42%, and minimal (<100 cc) residual in 23% of the patients. Four patients had an associated bladder calculus, and two of the four stones were radiolucent. Cystoscopy confirmed radiologic findings of significant residual urine associated with trabeculation and bladder outlet obstruction due to trigonal enlargement of the prostate. Associated bladder calculi were confirmed in four patients, and two other patients had associated bladder neoplasm. The urethra was normal in all patients examined. The prostate urethra was elongated secondary to lateral lobe enlargement of the prostate, with a mean length of 3.5 cm (range 2.5–6 cm). Ten percent of the patients had minimal enlargement of the lateral lobes but significant enlargement of the median lobe only. Residual urine varied from 40 to 1200 cc with an average residual urine volume of 170 cc. Urine culture was without significant growth in 93% of the patients. Seven patients had gram-negative sepsis due to *Escherichia coli*. Bladder trabeculation was 2+ to 3+ in 90% of all patients evaluated, and the remaining 10% had 4+ trabeculation with diverticula formation.

One hundred patients had transurethral resection of the prostate at Chinese Hospital. During the same period only two open prostatectomies were performed. The average period of resection was 50 min (range 20–90 min). The glandular weight of the specimen ranged from 2 to 98 g (average 15 g). The average estimated blood loss was 250 cc, and four patients required packed red cell transfusion due to hypovolemia secondary to surgical blood loss. Six percent of the group had associated stage A-I carcinoma of the prostate. Ninety percent of the patients voided well immediately after removal of the urethral catheter on the first day after surgery, whereas 8% required first-day recatheterization because of urinary retention; all eight of these patients had had their surgery because of acute urinary retention. They voided well after treatment with urecholine for 24 hr. Ninety-eight percent of the patients ultimately had good voiding patterns prior to discharge from the hospital. Two patients developed pulmonary embolus 8 and 19 days, respectively, after TUR of the prostate; both patients were free of their urethral catheter prior to their terminal event.

**Conclusion**

It appears that symptomatic prostatism is not uncommon in the Chinese community in San Francisco. The Chinese patients frequently accept their