Case: Mr. C was a 92-year-old man with advanced dementia who was brought to the emergency room for agitation and hitting another resident in the dementia unit of his nursing home. This behavior was not new for him. Mr. C, a World War II veteran, spent his time pacing the halls; though he was not oriented, he spoke clearly (frequently about events during the war), ate well, walked easily, and was physically strong. Most of the time Mr. C was calm and could be redirected. However, he occasionally would become agitated and even violent. He would sometimes take his prescribed medications and sometimes refused; when he refused, it was difficult to persuade him and impossible to force him. Multiple medications had been prescribed for his agitation, including lorazepam, risperidone, and olanzapine; none were successful. When he came to the emergency room, he was discovered to have significant urinary retention. Two liters of urine were removed from the bladder, and he became calmer.

Discussion: More history from the patient’s daughter and the nursing home staff revealed that many of Mr. C’s episodes of agitation coincided with urinary tract infections (UTIs). Among the medications which Mr. C regularly refused was terazosin, prescribed for benign prostatic hypertrophy (BPH). Urinary retention caused by his untreated BPH made him more susceptible to UTIs and also caused pain which he was unable to explain verbally. An indwelling Foley catheter had been previously attempted; however, the presence of the catheter also seemed to cause him distress. How could Mr. C’s symptoms from BPH be treated in a way that would not worsen his agitation?

The incidence of BPH increases with age, from 20% of 40-year-old men to more than 80% of men over the age of 80. Common symptoms are urinary frequency, nocturia, urgency, hesitancy, weak or intermittent urine stream, straining to void, and sensation of incomplete voiding. There are two main types of medical treatment for BPH: alpha blockers and 5-alpha-reductase inhibitors. Alpha blockers work by reducing prostatic smooth muscle tone and have an immediate effect on urinary flow.

Nonselective alpha blockers (doxazosin, prazosin, and terazosin) can also have systemic side effects, including dizziness, orthostatic hypotension and fatigue. Tamsulosin is a highly selective alpha1A-adrenergic antagonist which avoids these side effects but is more expensive. Studies of alpha antagonists have found an average 25-30% improvement in urinary symptoms. Five-alpha-reductase inhibitors (finasteride, dutasteride) act by preventing the conversion of testosterone to dihydrotestosterone in the prostate gland, thereby shrinking the gland. Men generally need treatment for 6 to 12 months before the size of the prostate is reduced enough to improve symptoms.

For men with acute urinary retention due to BPH, many urologists recommend a trial of catheterization with use of alpha blockers, followed by attempts at spontaneous voiding. If this fails, transurethral resection of the prostate (TURP) is often performed. This procedure involves the insertion of a scope into the bladder, while the bladder is irrigated; the urologist is able to directly visualize the prostate tissue and resect it piece by piece. The procedure takes 60 to 90 minutes and can be performed under general anesthesia, with a spinal or epidural nerve block or a regional nerve block.

For men who are not candidates for TURP and who have ongoing urinary obstruction, catheterization is an option. A foley catheter can be placed in an office setting, but carries an increased risk of urinary tract infection. Intermittent catheterization can also be used for long term management of urinary obstruction. The final option is a suprapubic catheter, which is placed surgically through the abdominal wall and into the bladder. This reduces trauma to the urethra and the incidence of bladder infection.

Mr. C’s daughter met with palliative care, psychiatry, internal medicine and urology to discuss the options. Medical treatment for BPH was unlikely to be successful in reducing further episodes. Intermittent catheterization was discussed with urology; however, due to the size of his prostate, catheterization was extremely difficult.
Even if Mr. C would allow it, it couldn’t be done by nursing home staff. TURP might be the most effective treatment for him, but the urologists did not recommend that or any other surgical procedure due to his overall health and his lack of ability to adhere to post-operative care. It was decided to attempt an indwelling Foley again; however, even with the administration of haloperidol prior to the procedure, Mr. C became so distressed and agitated that his daughter asked the urologists to stop.

The next day we met again, and in accordance with Mr. C’s daughter’s goals for her father decided not to attempt further catheterization or to force medications. She thought Mr. C would not want his life extended at all in his current impaired state. We would attempt to reduce Mr. C’s BPH with measures that were not intrusive to him by continuing to offer him alpha blocking medication and a five-alpha-reductase inhibitor, and by discontinuing any medications that could increase urinary symptoms such as diuretics, anticholinergic agents, and tricyclic antidepressants. When he did have agitation we would assume that it was due to obstructive symptoms and would treat the discomfort with sublingual morphine. Eventually we expected that his bladder would become infected leading to sepsis, or urinary obstruction would damage his kidneys and he would go into renal failure. Rather than treating with antibiotics or readmitting to the hospital, we would keep him comfortable in his current setting.

Conclusion: In this case, a simple condition that is easily treatable in most men became one that we expected to lead to Mr. C’s death. However, the diagnosis that led it to become life-limiting was Mr. C’s dementia, and the heavy burden which BPH treatments would have placed on him.

Mr. C’s daughter based her decision on Mr. C’s values, saying that if the father she was raised by was able to see himself in his current condition, he would have wanted both to stay in place and to be allowed to die with dignity.

Forced catheterization and antipsychotic treatment might have prolonged his life by years but would have caused terrible suffering to himself and his family. With the decision to allow his BPH to progress with minimal intervention, we were able to discharge Mr. C to enroll in hospice at his nursing home and completed a POLST form indicating “comfort measures only”.

References: