An 87-year-old man with poorly-controlled diabetes mellitus presented with delirium. A physical examination revealed suprapubic distension (Picture 1). Ultrasonography showed a markedly distended urinary bladder (Picture 2), and extensive investigations failed to reveal the etiology. Insertion of a urethral catheter yielded 1,200 milliliters of urine, leading to resolution of the abdominal distension (Picture 3) and an improvement of the patient’s mental state.

An altered mental status (AMS) is a frequent cause of emergency presentation in the elderly population. AMS associated with acute urinary retention was first reported in 1990 and was termed “cystocerebral syndrome” (1). The level of AMS ranges from complete unresponsiveness to confusion (2). The proposed mechanism involves increased bladder tension that induces sympathetic tone and catecholamine release, which triggers AMS. The AMS resolves quickly following bladder decompression.

Neurogenic bladder caused by diabetes mellitus was the suspected cause of urinary retention in this case. The patient was thereafter educated in self-catheterization, and there has since been no recurrence.

Key words: cystocerebral syndrome, altered mental status, urinary retention, elderly, case report

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