

HOSPITAL DELIRIUM: A SOURCE OF MORBIDITY AND MORTALITY

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STORY FROM THE FRONT LINES

A man in his 70s with history of castrate-resistant prostate cancer was admitted with gross hematuria to undergo continuous bladder irrigation. He had significant pain related to bony metastases before hospitalization, but experienced acutely increased pain to the right femur shortly after admission. Subsequent MRI showed a new mass extending from the femoral neck into the proximal femoral diaphysis that was at risk for pathologic fracture. Orthopedic surgery was consulted for stabilizing nail placement, but requested biopsy of the lesion to differentiate new primary from metastatic disease prior to the procedure. This led to a prolonged hospital stay and significant delirium in the latter stages of hospitalization. The patient was ultimately hospitalized for greater than one month and passed away within two weeks of hospital discharge.

TEACHABLE MOMENT

The DSM-V defines delirium as a disturbance in attention and awareness developing over a short period of time that represents a change from baseline mental status. This is accompanied by a disturbance in cognition resulting from a current aspect of the history, physical examination, or laboratory findings as opposed to a pre-existing neurocognitive disorder.¹ Delirium is well studied amongst hospitalized patients and occurs more frequently in elderly patients with roughly 30 percent experiencing delirium during their hospitalization.² Development of delirium contributes significantly to morbidity including increased time of hospitalization and mortality following hospital discharge.

Numerous studies have examined the link between delirium and increased hospital stay. An early meta-analysis regarding this subject found that elderly patients with delirium had an average length of stay of 20.7 days as compared to 8.9 days in elderly patients without delirium.³ A more recent study of surgical patients over age 50 who required post-operative ICU stay showed similar results with 16.3-day hospital stays for patients who developed delirium and 7.9-day stays in patients without.⁴ This evidence suggests patients who develop delirium while hospitalized can anticipate spending approximately twice as long in the hospital when compared to a similar cohort without delirium.

Delirium has also been shown to increase hospital mortality. Combined results from the above meta-analysis showed a 14.2% mortality rate at 1 month and 22.2% at 6 months in patients with delirium as opposed to 4.8% and 10.6%, respectively, in the non-delirious cohort.³ A similar result was obtained in surgical patients with a 20% mortality rate at discharge in delirious patients and 3% in those without delirium.⁴

The markedly increased length of hospitalization from delirium along with an increased mortality rate following discharge clearly argues in favor of taking measures to prevent hospital delirium. The etiology of delirium in our patient was likely multifactorial with increased analgesia requirements and urinary catheterization playing a role in addition to prolonged hospitalization. However, the benefit of adding diagnostic certainty before performing a procedure aimed at increasing functional capacity, and consequently adding to length of hospitalization, must be considered in the context of the patient's clinical presentation.

REFERENCES

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