

Prolonging aggressive healthcare in the elderly
Angela Budgin, MD

Story from the Front Lines

A 75 year old lady presented to the hospital with a HFrEF exacerbation due to severe aortic stenosis. Her code status was initially DNR/DNI. She was treated medically for her heart failure with diuresis but was ultimately offered a trans-catheter aortic valve replacement (TAVR). In order to have this performed, she was required to be full code for the procedure and for up to one month afterward. Postoperatively, the patient developed atrial flutter resistant to rate control with beta-blockers, which prompted multiple episodes of pulmonary edema treated with diuretics, which eventually led to acute kidney injury. When diuresis was held, fluid reaccumulated in the lungs, necessitating temporary use of mechanical ventilation.

Due to the heart failure which was exacerbated by tachycardia, it was felt that the patient would benefit from an atrial ablation, but this procedure was delayed multiple times due to altered mental status associated with pneumonia. The patient continued to have difficulties with volume overload and diuresis, and eventually was unable to come off BiPAP. Eventually, the decision was made by the patient and her family to revert code status to DNR/DNI and pursue comfort measures, and death occurred within hours.

Teachable Moment

This elderly patient with severe aortic stenosis underwent a TAVR procedure which, ironically, led to further heart failure from atrial flutter, complicated by multiple hospital-associated infections, cardiac arrest due to heart block requiring another procedure, and ultimately death due to volume overload. The situation was confounded by the agreement to become full code for up to one month after the TAVR, further directing overly aggressive treatment that was perhaps not in the best interest of the patient, which may qualify as a “silent misdiagnosis” on the part of the physicians caring for the patient.¹ A “silent misdiagnosis” refers to physicians not knowing or understanding the patient’s preferences or values in his or her care, which may lead to undesired further treatment and costs.^{1,2} The consequences of overtreatment leading to a longer hospitalization and further complications were evident in this case.

If the patient and family members been more involved in directing care from the beginning, the anxiety and additional hospital costs may have been lower, as the patient may very well have passed away from severe CHF in the same amount of time as it took for her death to result after these procedures and their complications. The patient’s goals of care, as well as the patient’s preferences and values, should have been discussed earlier to determine if additional interventions were desired by the patient. Early end-of-life conversations have been associated with improved quality of life, reduced use of life-sustaining treatments near death, earlier hospice referrals, and care that is more consistent with patient preferences.^{2,3} Furthermore, if Palliative Care had been involved from the beginning, this patient may have been spared several traumatizing experiences near the end of life. Palliative care patients have been shown to have significantly improved quality of life and mood and up to 25% higher survival, as patients feel more informed and involved in their care.^{2,3} Although many physicians may be uncomfortable

broaching end-of-life topics, the conversations are necessary in order to care for the patient as a whole. Physicians must be able to recognize when the end of life is nearing and utilize appropriate resources, such as Palliative Care, as needed to help the patient and family members cope during an often confusing and stressful time.

References:

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3. Wright AA, Zhang B, Ray A, et al. Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *JAMA.* 2008;300(14): 1665-1673.