ASO Author Reflections: Which Patients with Colon Cancer Refuse Recommended Surgery?

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PAST

Colon cancer is responsible for the third-most cancer-related deaths in the United States. This is despite advancements in operative techniques and perioperative care, which have greatly expanded the indications for, safety of, and benefits from cancer-directed surgery in colon cancer. Concomitantly, the internet age has granted patients greater access to both information and misinformation, pushing medicine at-large further into collaborative or patient-directed decision-making. It is paramount to understand the factors influencing patients' approach to clinical decision-making and subsequent outcomes. We sought to describe risk factors for refusal of recommended cancer-directed surgery, as well as the survival outcomes of those refusing recommended surgery.

PRESENT

In a database study of more than 288,000 patients with primary colon cancer, 1.3% of patients refused colon cancer surgery, double the refusal rate observed in breast cancer (0.64%), where surgery also is typically undertaken with curative intent.¹ Perhaps this may be attributed to the well-publicized, positive, extirpative, and reconstructive

surgical outcomes experienced by patients with breast cancer even when diagnosed with later-stage disease, which colon cancer does not enjoy.

We found increased age, black race, insurance via Medicaid, and marital status other than "married" increased the odds of refusing surgery.² Minorities had increased survival compared with Caucasians after refusing surgery, suggesting that minorities were more likely to decline surgery with earlier disease-stage than their Caucasian counterparts.

FUTURE

The decision to undergo any surgery is personal and complex; "the only minor surgery is surgery that happens to someone else." Previously, elderly patients largely attributed their refusal of surgery to a fear of complications, a common discussion when addressing surgery in any age group.³ A prospective study following patients with newly diagnosed primary colon cancer would provide much-needed insight into the decision-making process of patients refusing recommended surgery.

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REFERENCES

1. Gaitanidis A, Alevizakos M, Tsalikidis C, Tsaroucha A, Simopoulos C, Pitiakoudis M. Refusal of cancer-directed surgery by breast cancer patients: risk factors and survival outcomes. *Clin Breast Cancer*. 2018;18(4):e469–76.
2. Makar GS, Makar M, Obinero C, et al. Refusal of cancer-directed surgery in patients with colon cancer: risk factors of refusal and survival data. *Ann Surg Oncol*. 2020. <https://doi.org/10.1245/s10434-020-08783-1>.
3. Rothman MD, Van Ness PH, O'Leary JR, Fried TR. Refusal of medical and surgical interventions by older persons with advanced chronic disease. *J Gen Intern Med*. 2007;22(7):982–7.

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