

## Paper Alert

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# Psychological Stress and Suicide in Bladder Cancer Patients

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The diagnosis of any cancer is a very serious event. It is thus not surprising that the response to such a diagnosis in many patients is despair, fear and concern. As one might expect, as a reflection of this psychological stress, the rate of suicide among patients receiving a new diagnosis of any cancer (except non-melanoma skin cancer) is 2 to 3 times higher than in the age and gender matched general population, being minimally higher with advanced age, slightly higher (1.28 times –but with overlapping 95% confidence intervals) in men than women, and higher yet in patients with pre-existing serious (requiring psychiatric hospitalization) psychiatric conditions. These data were reported in a Swedish population-based study by Fang and co-workers, who reviewed individual patients' records in that country's national healthcare registry [1]. While the Swedish population is relatively homogeneous compared to that in many other countries, these data are probably quite representative of what occurs in other western countries.

These authors also found that suicide rates were highest in individuals with poor prognosis malignancies, such as esophageal, pancreatic, liver or lung cancer. They reported that the peak time for suicide was within 1 month after diagnosis, decreasing over the remaining year, and declining further over the remaining months up to 4.07 years mean follow-up (adjusted for other causes of death including cancer death) [1].

However, Fang, et al. only reported on “successful suicides” (suicide attempts that resulted in death) [1].

Calati and co-workers also looking at all cancers in a meta-analysis of 15 “acceptable” published articles (out of 104 publications identified in various literature searches), reported that suicide attempts were not more frequent in cancer patients compared with appropriately matched non-cancer controls, but the likelihood of succeeding at suicide was – confirming the profound psychological impact of a cancer diagnosis in some patients, who clearly are doing more than merely calling out for help [2].

What about bladder cancer patients? Unfortunately, using another population data set from a country with nationalized healthcare, the United Kingdom, Ashfar and coworkers reported that successful suicide was 4.48 times more common in bladder cancer patients than in the general population, and 1.6 times more common than in all patients diagnosed with the 10 most common cancers [3]. Like Calati, et al. [2], they also found a much higher ratio of suicidal death to attempt (1/7) for bladder cancer patients compared with the general population (1/25). Again, a slightly higher rate of successful suicide occurred in patients with advanced age, but there was no significant differences found between the genders or in patients with higher Charlson comorbidity scores. However, what was not expected is that the mean time from diagnosis to successful suicide in bladder cancer patients was 3 years [3], compared to a few months for all cancers in the Swedish study [1].

Since both studies used data from individual patient records abstracted from national health registries, the reasons for this discrepancy are not apparent, although how suicidal death was reported may have been different. Additionally, since the British study has only been presented in abstract form (at the 2018 European Urological Association annual

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meeting), other critical details, such as the impact of bladder cancer's stages, grades, and treatments, the influence of concurrent other diseases and their treatments, and of demographic factors on attempting and committing suicide remains uncertain. We await publication of Ashfar, et al's full study.

Finally, these findings are more disturbing in the context of those by Fung, et al., who investigated the impact of a bladder cancer diagnosis on health related quality of life in the United States in a cohort of bladder cancer patients using the Medicare Health Outcomes survey [4]. This survey is given to a randomly chosen sample of Medicare beneficiaries before they received a diagnosis of cancer, and was linked to the Surveillance, Epidemiology and End Results (SEER) National Cancer database. At various times after receiving a bladder cancer diagnosis, patients completed a follow-up survey. The authors reported a significantly reduced (from the pre-bladder cancer diagnosis survey) "mental component" summary (MCS) (which in part is a survey of current emotional state) for the first five years after a diagnosis of non-muscle invasive bladder cancer, but (owing primarily to the small number of individuals who completed the survey before diagnosis), no significant reduction in MCS in muscle invasive bladder cancer patients [4]. The greatest decline in MCS from before the diagnosis of bladder cancer occurred in the first three years after diagnosis in both tumor stage groups [4].

Thus, whether by evaluating large databases, reviewing publications, or examining individual patient records, it is clear that receiving a diagnosis of any cancer, and particularly of bladder cancer, induces considerable psychological stress that is not manageable in some patients. All urologists must recognize this and have a very low threshold for asking patients and family members about suicidal ideation and depression. When identified, susceptible patients should be rapidly encouraged and directed to receive appropriate psychological assessment, care, and support. This is incumbent on all urologists and other physicians, who must maintain vigilance about this matter throughout the lifetime of each bladder cancer patient.

## REFERENCES

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