

Certain bladder-cancer patients may be at high risk of disease recurrence despite bladder removal

May 7 2013

Patients with advanced bladder cancers that are surgically removed might need additional therapy to prevent recurrence in certain situations, a new UT Southwestern Medical Center study suggests.

The five-year international study led by researchers at UT Southwestern validates the use of a marker panel to predict which patients are more likely to have a recurrence of cancer after bladder removal, thereby identifying those patients as good candidates for follow-up chemotherapy.

The findings, published in the most recent edition of *European Urology*, are important because additional molecular information could help bladder-cancer patients and their physicians decide whether administering further toxic chemotherapy is worth the risk, said Dr. Yair Lotan, professor of urology at UT Southwestern and the study's primary investigator and first author.

Bladder cancer is the fourth most common cancer diagnosed in men, according to the <u>American Cancer Society</u>. The ACS estimates that more than 72,500 cases will be diagnosed in the United States this year, and that more than 15,200 people will die from the disease in 2013.

Patients with muscle-<u>invasive bladder cancer</u> typically are treated by removing all or part of the bladder (a cystectomy procedure) but are



infrequently given additional chemotherapy, despite an overall relapse rate of one in every three cases.

Using five commercially available markers and the tissues of patients who had their bladders removed, UT Southwestern researchers in the departments of urology and pathology and the Harold C. Simmons Cancer Center monitored a group of 216 patients to track if their cancers recurred.

When controlled for pathologic factors such as stage, grade, lymphovascular invasion, lymph node status, surgical margin status, and whether the patients had already received chemotherapy, the number of altered <u>biomarkers</u> were found to be an <u>independent predictor</u> of recurrence and cancer-specific mortality, the researchers found.

"It is well known that bladder cancer tumors have certain molecular alterations, but the problem is that there has been little data regarding which patients should get additional therapy, especially if there is no radiologic or pathologic evidence that the cancer has spread beyond the bladder," Dr. Lotan said. "This situation exists despite the fact that approximately 35 percent of patients treated by cystectomy develop metastatic disease and many of these individuals die of their disease."

The investigation's goal was to establish whether molecular markers that are involved in cell cycle regulation and proliferation could help identify those patients at higher risk for recurrence or metastasis following bladder-cancer surgery, Dr. Lotan said.

The next steps will be to try to incorporate the molecular marker panel into clinical practice. Dr. Lotan is also a member of the Simmons <u>Cancer</u> <u>Center</u>.



Provided by UT Southwestern Medical Center

Citation: Certain bladder-cancer patients may be at high risk of disease recurrence despite bladder removal (2013, May 7) retrieved 23 April 2024 from https://medicalxpress.com/news/2013-05-bladder-cancer-patients-high-disease-recurrence.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.