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9/11 First Responders Face Higher Cancer Risk 20 Years Later

Twenty years on, responders to the World Trade Center attacks in New York City are showing increased risks of certain cancers, two new studies confirm.

Researchers found higher-than-average rates of prostate cancer (PCa) among firefighters, medics and other workers who toiled at the disaster site on and after September 11, 2001. And compared with firefighters from other major U.S. cities, those exposed to the 9/11 disaster had higher risks of both prostate and thyroid cancers.

“It’s been known that World Trade Center rescue and recovery workers have above-average rates of certain cancers. But the new studies help clarify the picture further,” experts said.

In one, researchers found that increased risks of PCa began showing up surprisingly early – a little over 5 years after responders’ exposure to the Twin Towers site and the toxic dust cloud that enveloped it.

“We were not expecting the latency period to be that short,” said senior researcher Charles Hall, a professor at Albert Einstein College of Medicine in New York City. Often, cancer has a long latency – meaning it develops many years after a person’s initial exposure to a carcinogen.

Hall said the new findings suggest “we should not assume all cancers have a long latency period. And that,” he said, “could inform medical follow-up of responders to other large-scale disasters, such as major wildfires.” (Continued on page 8)

Potential New Standard for Post-Prostatectomy Radiotherapy

Side Effects at 2 Years Similar with Hypofractionated vs. Conventional RT

For post-prostatectomy (RP) radiotherapy (RT), use of a hypofractionated regimen was noninferior to conventional RT in terms of patient-reported gastrointestinal or genitourinary (GI/GU) toxicities, a phase III study demonstrated.

The NRG Oncology GU-003 trial met its co-primary endpoints, with no clinically or statistically significant differences between arms on the Expanded Prostate Cancer Index Composite (EPIC) for both GI or GU toxicities at 2 years (P=0.12), reported Mark Buyyounouski, MD, of Stanford University in California.

For the hypofractionated versus conventional RT arms, respectively, mean changes from baseline on the EPIC GI and GU domains at this time point were:

- GI toxicities: -2.2 (±13.2) vs. -1.5 (±14.1)
- GU toxicities: -5.2 (±22.8) vs. -3.0 (±23.3)

“HYPORT [hypofractionated post-prostatectomy radiotherapy] represents a new practice standard for men receiving post-RP RT,” said Buyyounouski during a press briefing at the annual meeting of the American Society for Radiation Oncology (ASTRO).

At the completion of RT, the average change in GI scores was significantly worse for the hypofractionated RT group (-15.0 [±21.3]) compared to the conventional RT group (-6.8 [±15.8]; P=0.0011), but these differ- (Continued on page 4)
Subtotal Surgical Therapy for Localized Prostate Cancer: A Single-Center Precision Prostatectomy Experience in 25 Men, and SEER-Registry Data Analysis

Soood A, Jeong W, Keeley J, Abdullah F, Hassan O, Gupta N, Menon M

Transl Androl Urol 10: 3155-66, 2021

Background: We recently described a novel form of focal therapy for prostate cancer (PCa) – the precision prostatectomy. We report on the first 25 consecutive patients. Further, utilizing Surveillance Epidemiology and End Results (SEER)-registry data, we assess long-term oncological efficacies of various focal therapy techniques.

Methods: Men who met the criteria: (I) PSA ≤15 ng/mL, (II) stage ≤T2, (III) dominant unilateral lesion with Gleason ≤4+3 with any number or percentage (%) of cores involved ipsilaterally (same lobe of prostate) on biopsy, (IV) no prior Gleason ≥4 contralaterally (opposite lobe of prostate), and (V) preoperative erectile function (EF) score (IIEF-5/SHIM) of ≥17 with/without PDE-5i were included in this prospective, single-arm, IDEAL stage 2b study (December 2016 to July 2017). Safety of the technique, and intermediate-term urinary, sexual, and oncological outcomes were studied. Descriptive statistics and Kaplan-Meier (KM) analysis were used to assess 12-month urinary continence (0-1 pad), 12-month sexual potency (SHIM ≥17), and 36-month freedom from clinically significant PCa (grade group ≥2), radical treatment, metastatic disease, and mortality. SEER-registry was queried to evaluate PCa-specific survival in men undergoing hyperthermia, cryotherapy, or segmental prostatectomy.

Results: At study entry, the median (interquartile range [IQR]) age, PSA and SHIM score were 56.5 (53.1-62.3) years, 4.2 (3.8-5.9) ng/mL and 23 [20-25], respectively. Only 1 patient met the Epstein criteria for active surveillance. All patients were followed for a minimum of 2 years. At 12 months, from a functional standpoint, all men were continent. Twenty-three (92%) men were potent at 12 months. From an oncological standpoint, at 36 months, the KM analysis (95% Confidence Interval [CI]) demonstrated a 96.2% (92.9-98.7%) rate of freedom from clinically significant PCa and a 92.7% (88.9-97.2%) rate of freedom from radical treatment. All men were alive and free of metastatic disease at the latest follow-up. Analysis of the SEER-registry data demonstrated 10-year PCa-specific survival rates of 91.6 to 97.7% among the 3 studied modalities, P=0.298.

Conclusions: Precision prostatectomy is feasible, technically safe, and offers excellent postoperative functional results. At 36 months of follow-up, the oncological outcomes and secondary procedure rates appear to be at par with the ablative forms of focal therapy.

Online Risk Tool Facilitates Decision Making in Early Nonmetastatic PCa

“An individualized risk communication tool, Predict Prostate, leads to more realistic perceptions about survival, thereby facilitating treatment decisions for men with newly diagnosed non-metastatic disease,” researchers say.

“The tool is freely available and has been accessed more than a million times,” Dr. David Thurtle of the University of Cambridge School of Medicine told Reuters Health.

“We show that men greatly overestimate the lethality of prostate cancer (PCa) – this itself may impact their decision-making around treatment,” he said. Predict Prostate “may have implications for better patient engagement and more informed consent. Also, we demonstrate that using the tool is feasible within the clinical pathway, it reduces decisional conflict, does not increase anxiety and is almost universally popular with patients.

“This study was not powered to assess the tool’s impact upon final treatment decisions, although it was assessed as a secondary outcome,” he added. “A far larger trial would be needed to assess this outcome.”

As reported online in European Urology, Dr. Thurtle and colleagues randomized 145 newly diagnosed men (median age 67) considering active surveillance (AS) or radical treatment to either standard of care (SOC) information or SOC and the Predict Prostate tool. The goal was to assess the impact of the tool on decisional conflict, uncertainty, anxiety, and perception of survival.

Mean Decisional Conflict Scale scores were 26% lower in the Predict Prostate group (16.1) than in the SOC group (21.7). Scores on “support,” “uncertainty,” and “value clarity” subscales all favored the tool. No significant differences were seen in anxiety scores or final treatment selection between the 2 groups. However, patient perception of 15-year PCa-specific mortality (PCS) and overall survival benefit from radical (Continued on page 6)
Doc Moyad’s What Works & What is Worthless Column — Also Known as “No Bogus Science” Column
“Also Advertise Potential Side Benefits!?”

Mark A. Moyad, MD, MPH, University of Michigan Medical Center, Department of Urology

Editor’s Note: Us TOO invites certain physicians and others to provide information and commentary for the Hot SHEET to enrich its content to empower the reader. This column contains the opinions and thoughts of its author and are not necessarily those of Us TOO International.

I have briefly mentioned this in a previous column, but it is worth repeating because it gives me some self-therapy that I desperately need, and jogging daily only takes care of a portion of what ails me. I always get a modest chuckle, but never a guffaw, from some drug commercials where at the end of a 30-60 second advertisement you hear someone rapidly mention possible SIDE EFFECTS that might occur. Basically, many of these commercials first focus on the one major benefit and then you hear the countless list of SIDE EFFECTS, even if they are super rare (now that is rare) you still hear that darn laundry list of anything that could go wrong. Yet, why is the glass always so half-empty and why not also hear from the half-full side. I mean, how many vaccine, or even other preventive vaccine, commercials have you seen that even get a chance to talk about the benefits in detail without having to go through anything and everything that could go wrong? However, I do love the shingles vaccine commercial, and the flu vaccine commercials are okay, but not great, because they make it seem as if only elder-ly folks need that shot.

Regardless, do you know what you never ever hear in almost any drug or vaccine commercial? The potential SIDE BENEFITS! And I am not kidding here! I wish these advertisements were different. Now you can give me all the legal gibberish (aka gobbledygook aka BS) as to why the commercial announcer is never allowed to mention the potential SIDE BENEFITS even if rare or common, but then why do they have to mention the rare SIDE EFFECTS? It does not seem fair. Okay, again, you must mention the less common or even rare SIDE EFFECTS, but you are not allowed to mention SIDE BENEFITS! Say what?! That does not make me happy, and it is one of the theories I have always held in my career of why adult preventive vaccine education has much room for improvement. So, when I get tired of this unfair advertising playing field, then occasionally I try to exert my minimal influence to change the score a bit! Recently, I was fortunate enough to publish a review article in a medical journal, and it focused on some of the potential SIDE BENEFITS of adult vaccines, including the shingles vaccine. Yet even over a 30-year public health career I never imagined how strong the data would continue to accrue over these potential SIDE BENEFITS. As I was submitting this column, for example, a preliminary look at the COVID vaccines found a potential lower risk of dying earlier from all causes, and not just from COVID, if you were vaccinated.1 We know COVID-19 can make many things go terribly wrong from head-to-toe, especially if you have a severe infection/inflammation. For example, there appears to be an increased risk of blood clots and other cardiovascular event risk with severe COVID-19, and what if these vaccines are found to reduce the risk of these events? This is not new information but, rather, information that you NEVER GET TO HEAR IN THE ADVERTISEMENT of a preventive vaccine.

In earlier columns, I mentioned I was becoming more and more convinced the Shingles vaccine, for example, could potentially reduce the risk of some cardiovascular events such as a stroke, but where the heck is that advertisement? Additionally, in the past few months there was a randomized, placebo-controlled trial of the flu vaccine from Europe, and it appeared to receive minimal-to-absolutely-no attention?! Basically, most of the participants were survivors of a cardiovascular event (heart attack) and then received either a flu vaccine or placebo vaccine. Anyway, when the trial was stopped early (because of the COVID pandemic) the group receiving the influenza vaccination had a “lower risk of all-cause death and cardiovascular death at 12 months compared to placebo.” Yup! This is correct! Despite the fact it was a “randomized, double-blind, placebo-controlled, multicenter trial” the chances you will hear about this potential SIDE BENEFIT from a flu vaccine commercial is slim to none, and slim just left town.

I also wonder how many people realize that multiple studies, including a recent one from the U.S. found another potential ancillary benefit from the flu vaccine against the COVID-19 virus. Patients with the flu shot had a significantly lower risk of sepsis, stroke, blood clots (DVT), and emergency department and intensive care unit (ICU) admissions from COVID-19 compared to those that did not receive the flu shot. Now, okay, I admit this is all preliminary stuff, but intriguing because perhaps these other vaccines help prime the immune system to be even more alert and ready, for example, against a variety of invaders. There are multiple other studies out there from Italy to the University of Florida that echo some of these same potential benefits. In fact a 2021 study, that received minimal attention, from the Mayo clinic and other researchers found evidence that multiple non-COVID vaccines (flu, hepatitis A/B, MMR, pneumonia, etc.) potentially protected someone from getting COVID.5 Where was/is that commercial? I have no idea, but what broke my heart was early in the pandemic there were debates in some circles of the value of the flu and other shots? Say what? Value? They appeared to be invaluable and continue to be invaluable for many people, as do the other preventive vaccines. Just imagine the potential positive or beneficial data that will occur when researchers look at people that received the COVID vaccine in addition to other vaccines including the flu shot!

Unfortunately, it has become so difficult to appreciate, not only how effective many of these vaccines have been, but also, what breaks my public health heart, what was and continues to be the minimal attention of the so called “SIDE BENEFITS.” In prostate cancer, if there is a side benefit to taking any supplement or drug then it seems to garner a lot of attention so, for example, when ancillary benefits of cholesterol lowering medications are being stud...
Potential New Standard for Post-Prostatectomy Radiotherapy (Continued from page 1)

65 years (P <0.001), and 0.70 for those aged 66-75 years (P <0.001) compared with those aged 55 years or less. Both differences were statistically significant.

The HRs were 1.29 and 1.31 for men with PSA of 4.01-10 ng/mL (P <0.001) and >10.01 ng/mL (P <0.004), respectively, vs. those with PSA 0-4.

“Discontinuation of AS was also more common when care was provided at academic institutions and by higher volume physicians and institutions,” the team writes.

The median time to AS discontinuation was 16 months, and treatment-free survival among the AS patients was 85, 58, and 52% at 1, 3 and 5 years, respectively.

“Decisions vanished as time went on. No significant differences were seen for GU scores at RT completion (-7.9 [±20.9] and -4.3 [±22.6], respectively; P=0.70), or at any point thereafter.

At a median follow-up of 2.1 years, there was no difference between groups for biochemical or local failure. While this was a noninferiority study about hypofractionation, “it is also a study about quality of life,” said Buyyounouski. “It will be important for any new practice standard to preserve quality of life for patients.”

Buyyounouski noted that hypofractionation is used every day in treating intact prostate cancer (PCa), but the researchers wanted to evaluate whether it could also be an appropriate option for men after they’ve undergone RP.

“This is an area of unmet need,” said ASTRO discussant Sophia Kamran, MD, of Massachusetts General Hospital Cancer Center in Boston, who called the findings “potentially practice changing.”

She noted that multiple potential benefits can be realized if hypofractionated RT can be extended to post-RP patients, from time savings and added convenience for patients, to more efficient utilization of resources in radiology departments.

“The field is moving toward hypofractionated RT for PCa, and it really has been widely accepted in the intact setting,” Kamran said. “Using contemporary radiation techniques and image guidance, we are able to target a volume and are able to safely deliver hypofractionated RT that allows for multiple benefits on multiple fronts for our patients, and for our physicians as well.”

NRG Oncology GU-003 randomized 296 patients to either hypofractionated RT (62.5 Gy to the prostate bed in 25 fractions of 2.5 Gy) or conventional RT (66.6 Gy in 38 fractions of 1.8 Gy). Patients were eligible for the study if they had an undetectable PSA (<0.1 ng/mL) with either margin-negative pT3pN0/X or margin-positive pT2pN0/X adenocarcinoma of the prostate, or a detectable PSA (≥0.1 ng/mL) but pT2/3pN0/X disease.

“There was a lot of enthusiasm for this trial,” said Buyyounouski. “We accrued 294 patients in 1 year and we think this demonstrated the enthusiasm both on behalf of patients and physicians in adopting a new approach like this.”

Patients were stratified according to baseline EPIC scores and whether or not they had received androgen deprivation therapy (ADT). Changes in EPIC GU and GI domains were assessed at completion of RT, and at 6, 12, and 24 months.

Reference:

MedPage Today
25 October 2021

Active Surveillance for Prostate Cancer Switch After 4 Years (Continued from page 1)

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Active Surveillance for Prostate Cancer Switch After 4 Years (Continued from page 1)

“The results of this study are important to patients, providers, and policy,” the investigators write, adding that “[t]here is a dire need to develop robust tests such as biomarkers and advanced imaging to move the field beyond nonspecific measures (i.e., PSA) and invasive prostate biopsy.”

They further recommend combining competing health risks and patient characteristics with disease-specific traits to better select men for inclusion. “The practice would benefit from development of quality indicators, targeted continuing education for physicians, and patient education with shared decision-making at the onset of AS,” they conclude.

Writing in a related editorial, Michael S. Sessine, MD, and Jeffrey J. Tosian, MD, MPH, of Rogel Cancer Center, University of Michigan, Ann Arbor, note that some prospective AS programs are reporting increases in the proportion of men remaining on AS over time.

This is “likely the result of better initial patient selection in the modern era (i.e., less under sampling), with more patients exposed to MRI and targeted biopsies during diagnostic and confirmatory testing.” The lower treatment-free survival observed in the current study could be attributable to initial under sampling for the same reasons, they suggest.

In addition, the reason for switching to definitive treatment in the current study was unknown in 30% of cases, making it “difficult to know with certainty the root of these differences.”

“Regardless, Timilshina, et al. have added to the growing body of AS literature and provided potential risk factors for treatment that can be used to better educate and counsel patients initiating AS,” they conclude.

Medscape Medical News
14 September 2021

A Prostate Cancer Calendar for the Entire Community
Find an Event or Post an Event at:
www.prostatecancercalendar.org

US TOO INTERNATIONAL PROSTATE CANCER EDUCATION & SUPPORT

Hot SHEET – NOVEMBER 2021
Results of the recent phase III POP-RT (Prostate Only or Pelvic Radiation Therapy) clinical trial have answered a long-standing question, suggesting that prophylactic whole-pelvic RT (WPRT), rather than prostate-only RT (PORT), should be routinely considered for men with high-risk, locally advanced prostate cancer (PCa).

For the study, a team led by Vedang Murthy, MD, and Priyamvada Maitre, MD, of Tata Memorial Hospital in Mumbai, India, randomized 224 men to have either WPRT or PORT, along with a minimum of 2 years of androgen-deprivation therapy (ADT).

As the researchers reported in the Journal of Clinical Oncology (Vol. 39, pp. 1234-1242, 2021), 5-year biochemical failure-free survival and disease-free survival were significantly better in the WPRT arm. Pelvic RT was associated with a modest increase in grade 2 or higher late genitourinary toxicity, and there was a low incidence of gastrointestinal toxicity in both groups.

“Prophylactic pelvic RT using contemporary dose and technique of RT along with long-term ADT for high-risk and very high-risk PCa should be routinely considered as standard for these patients,” the investigators concluded.

In the following interview, Murthy, head of Radiation Oncology at the hospital, discussed how the trial improved on previous research and offered suggestions for how to discuss the results with patients.

ASCO: Based on your trial results, which patients with high-risk PCa are likely to benefit the most from whole-pelvic RT?

Murthy: This trial included men with high-risk PCa with pelvic nodal involvement risk at least 20% (calculated using the Roach formula, where nodal risk = 2/3 (serum PSA) + ([Gleason score - 6] ×10). Median nodal risk in the trial cohort was 37.8%.

Subgroup analysis for nodal risk categories 20-40% and >40% showed improved disease control with whole-pelvic RT in both subgroups, though the benefit was higher in patients with higher nodal risk. These results suggest that whole pelvic RT should be recommended in all patients with PCa with Roach nodal risk >20%.

ASCO: Your paper mentioned that two previous trials exploring the benefits of pelvic RT, GETUG-01 and RTOG 9413, failed to provide conclusive answers. Why do you think that was so?


GETUG-01 enrolled patients in low-risk and high-risk groups, treating the pelvis to the S1-S2 level using conventional 4-field RT portals, with 4-8 months of ADT in the high-risk group. RTOG 9413 included men with at least 15% nodal risk, treating pelvis up to L5-S1 with conventional four-field portals.

Neoadjuvant versus adjuvant ADT was additionally compared in a 4x4 factorial design in this trial, but an unexpected interaction between ADT and radiation fields led to conflicting results with no clear interpretation. Treatment protocols for high-risk PCa have evolved since then, with dose escalation and long-term ADT established as standard of care—hence the benefit of pelvic RT remained inconclusive in contemporary times.

ASCO: How was your trial different from those 2 previous trials?

Murthy: Unlike the previous efforts, this trial included uniformly higher-risk patients, with pelvic nodal involvement risk at least 20%.

Functional imaging (Ga PSMA PET-CT) was used in most patients to exclude metastatic disease.

Use of escalated RT dose to prostate (biologically effective dose 78-81 Gy), modern technique (image-guided intensity-modulated RT, IG-IMRT) and ADT (minimum 2 years) in both the arms reflect the current standards of treatment, setting it apart from the previous trials. This optimal selection criteria and treatment execution allowed a trial with a relatively small sample size to yield conclusive results.

ASCO: One outstanding question has been whether WPRT is necessary in the setting of long-term ADT, as prolonged testosterone suppression after RT may compensate for the exclusion of pelvic fields. What did your trial find?

Murthy: This trial showed benefit with whole pelvic RT despite a minimum 2 years of ADT in both the arms. We observed an increase in biochemical recurrence (BCR) in the prostate-only arm starting around 36 months, corresponding to the expected testosterone recovery time after completing ADT. Imaging at the time of BCR showed that recurrence in regional pelvic nodes—with or without distant metastases—was the chief difference between the two arms (15/29 in the prostate arm, 1/8 in the pelvic arm). This suggests that prolonged ADT is unable to control pelvic microscopic disease on its own. Pelvic RT still appears to be necessary to achieve optimum regional control, especially in men with higher risk of nodal involvement.

ASCO: Do you have any advice for how to discuss these trial results and treatment options with patients?

Murthy: Whole-pelvic RT appeared to be well tolerated in this trial, with an overall very low incidence of severe bowel or bladder toxicity. Acute toxicity did not increase with inclusion of pelvic nodes. In the long term, increased moderate (grade II) urinary adverse effects were observed with pelvic RT (20 vs. 9%). It should be noted that quality-of-life scores reported by patients were not worse with pelvic RT.

With use of image guided IMRT, no increase in bowel toxicity was observed. Pelvic RT improved biochemical control and reduced the risk of distant metastases and disease progression but has not yet shown benefit in improving overall survival. These points should be included in the discussion regarding benefits and risks of treatment options with patients being considered for pelvic RT.
Three randomized clinical trials and one meta-analysis reported no difference between early salvage radiation therapy (SRT) vs. adjuvant RT (ART) following radical prostatectomy (RP) in men with prostate cancer (PCa), but these studies may have missed an important benefit, researchers suggested.

Anthony D’Amico, MD, PhD, of Brigham and Women’s Hospital and Dana-Farber Cancer Institute in Boston, and colleagues noted that, after participants were followed for a median of 8 years, the researchers said that, after excluding men with PSA persistence, ART vs. early SRT was associated with significantly lower all-cause mortality risk among men with adverse pathology, both when pN1 cancers were excluded (Hazard Ratio [HR] 0.33, 95% Confidence Interval [CI] 0.13-0.85, P=0.02,) and included (HR 0.66, 95% CI 0.44-0.99, P=0.04).

In the following interview, D’Amico, who is chief of Genitourinary Radiation Oncology at Brigham and Women’s and Dana-Farber, discussed the details and implications of the study, as well as why this benefit may have been missed in previous research.

ASCO: As you noted, 3 clinical trials and a meta-analysis did not find the benefit your study reported. Why do you think that was?

D’Amico: Two reasons: The proportion of men with adverse pathology, where we saw an association with the use of adjuvant RT and a reduction in death, was only 9% to 16% in the three randomized studies, so the studies may have been underpowered to observe a benefit in these men.

Also, the studies reported on the endpoint of PFS (progression-free survival) driven by PSA failure, which can be subject to immortal time bias: the timeframe to plan, deliver, and assess the response to early SRT could be than the time to PSA failure in men with adverse pathology, given the short PSA doubling time (PSADT) in these men.

As a result, men receiving early SRT could be observed to fail at a time later than those receiving ART even if the time to failure for early SRT was earlier vs. ART – concealing any potential benefit to early SRT in these men with rapid PSA rises.

ASCO: What made you suspect these studies had missed something and decide to conduct your own research?

D’Amico: The hazard ratio in the RADICALS-RT trial, the largest of the 3, was 1.1 and, while not significant, suggested that early SRT could be superior to ART, which did not make clinical sense and could be explained by immortal time bias.

ASCO: What are the main implications of your findings?

D’Amico: These data should heighten awareness that men with adverse pathology at surgery may experience shortened survival due to an increase in death from PCa if physicians wait for a PSA rise to deliver RT (i.e., early SRT).

ASCO: Is there anything else you want to make sure oncologists understand about your study?

D’Amico: While it is retrospective, and therefore hypothesis generating, the additional analyses looking at the endpoint of death from PCa lend additional support to the idea that the association with the reduction in all-cause mortality with ART as compared to early SRT is a real benefit, especially in men with NO disease where the AHR [adjusted hazard ratio] was 0.33.

One could argue that younger, healthier men were selected for ART and that could explain the reduced risk of all-cause death, but we saw it was the reduced risk of death from PCa in this group, and not non-PCa-specific death, that drove the reduction in all-cause death.

ASCO: Are there any unanswered questions that require further research?

D’Amico: Yes: whether the addition of pelvic RT and/or supplemental ADT to ART can reduce the risk of all-cause mortality as opposed to early SRT in men with adverse pathology at RP remains to be answered.

Another question is the role of genomic classifiers in identifying men who may benefit from ART vs. SRT.

Reference:
MedPage Today 21 October 2021

Predict Prostate Tool (Continued from page 2)

Treatment Prostate Tool was more accurate among men in the Predict Prostate group. Overall, 57% of participants reported that Predict Prostate estimates for PCSM were lower than they expected, and 36% said they were less likely to select radical treatment.

Over 90% of men in the intervention group found the tool useful and would recommend it to others.

The authors note, “Predict Prostate is not a standalone tool, and it specifically focuses upon long-term survival, although some adverse effect information is also presented. Other tools may provide more detailed information about the benefits and harms of treatment.”

Dr. Thurtle added, “I would encourage clinicians to try out the tool in their clinical areas and assess for themselves its utility and impact upon practice. We are exploring whether a tool could be developed for men presenting with metastatic prostate cancer... given the number of new agents available.”

Dr. Murugesan Manoharan, chief of urologic oncology surgery at Miami Cancer Institute, commented, “This tool is based on a limited population from a region in the UK and hence cannot be universally applied. Outcome might be different based on the services provided, race, health access, etc.

“A broad multicenter/international study comparing different tools and decision-making is essential.”

Reuters Health
11 October 2021
PSMA PET Imaging Pinpoints Most Pelvic Nodal Metastases in High-Risk PCa

Diagnostic imaging with $^{68}$Ga-PSMA-11 PET detects about 80% of pelvic nodal metastases at initial staging of intermediate to high-risk prostate cancer (PCa), but a negative scan does not rule out the need for pelvic lymph node dissection (PLND).

As reported online in JAMA Oncology, Dr. Thomas Hope of the University of California, San Francisco and colleagues enrolled 764 men (median age, 69) with intermediate- to high-risk PCa considered for prostatectomy in a multicenter single-arm open-label phase 3 imaging trial. The primary end point was the sensitivity and specificity of $^{68}$Ga-PSMA-11 PET imaging for detecting pelvic lymph nodes vs. histopathology per-patient, using nodal region correlation.

Of the men who underwent imaging for primary staging, 277 (36%) subsequently underwent radical prostatectomy (RP) with PLND, and they comprised the efficacy analysis cohort. Pathology reports identified 75 men (27%) with pelvic nodal metastasis. By contrast, $^{68}$Ga-PSMA-11 PET results were positive in 40 (14%), 2 (1%), and 7 (3%) men for pelvic nodal, extrapelvic nodal, and bone metastatic disease, respectively.

Sensitivity of PSMA PET for pelvic nodal metastases was 0.40; specificity, 0.95; positive predictive value, 0.75; and negative predictive value, 0.81.

"We were expecting to have a higher sensitivity for pelvic disease in this study. This highlights how difficult it is to detect very small metastases in PCa patients," Dr. Hope stated. PSMA PET “is clearly the best way to stage patients with PCa but can miss low-volume disease in men at initial staging,” he said.

The authors note, “It is clear that if the $^{68}$Ga-PSMA-11 PET is positive, then disease is present. Conversely, the NPV of 0.81 indicates 20% of men undergoing RP with a negative PET will have nodes on pathology. Thus, surgeons should not use a negative PET to forgo a PLND.”

Dr. Hope added, “PSMA PET is only approved in a handful of countries. The US is one of the first to have approval of a PSMA PET radiotracer. “Approval of both $^{68}$Ga-PSMA-11 and $^{18}$F-DCFPyL will help improve access and reduce disparities. Also, the recent inclusion of both PSMA PET radiotracers in the newly updated NCCN guidelines will help convince private insurers to cover the studies.”

Dr. Joseph Osborne of Weill Cornell Medicine in New York, coauthor of a related editorial, commented to Reuters Health, “This manuscript gave context for FDA approval of 1 PSMA PET agent and a roadmap to guide appropriateness of RP. “With the approval of $^{18}$F PSMA PET,” he noted, “we have 2 powerful new PSMA PET imaging tools to utilize in men to fight against PCa.”

Reuter’s Heath
23 September 2021

Gut Bacteria May Fuel Prostate Cancer Treatment Resistance

A mainstay of treatment for prostate cancer (PCa) is to deprive it of androgens, the hormones that make it grow.

Over time, some prostate cancers become resistant to these treatments and begin to expand again. As with many cancers that show these behaviors, finding exactly what makes them resistant can be tricky.

A culprit may be bacteria that live in the gut. Researchers found that in castrated mice and in people having androgen deprivation therapy, some of these gut bacteria start producing androgens that are easily taken into the bloodstream. According to these findings, published in the journal Science, the androgens seem to support the growth of PCa and its resistance to treatment.

This study is the first to show that bacteria can produce testosterone, although the investigators are not yet sure what triggers them to start doing that. ADT may also lead to more of these hormone-producing microbes in the gut, the results suggest. Fecal bacterial of people with treatment-resistant prostate cancer also showed a link to lower life expectancy.

Fecal transplants from mice with CRPC could trigger resistance in animals with androgen-sensitive disease. Fecal transplants from men with CRPC to these mice led to the same effect: a shift to treatment resistance.

But the converse also was true: Fecal transplants from mice or men with hormone-susceptible PCa contributed to limiting tumor growth. The findings may suggest new therapeutic targets: the microbes living in the gut.

Researchers found that in wiping out gut bacteria in mice, progress to treatment resistance was much slower. Authors of an accompanying editorial say bacteria that might make these hormones could be in other places too, including the urinary tract or even in the prostate tumor itself.

WebMD Health News
15 October 2021

Doc Moyad
(Continued from page 3)
ied, we and I love to get excited about it! However, when the same applies to a vaccine we are just lucky to hear about it and reference it. So, maybe I need to do a better job of telling the audience about SIDE BENEFITS of vaccines, drugs, and even some supplements.

So, as I end this column, I am feeling very happy because being able to “inject” some knowledge in this area or going “more than skin deep” on this unsung subject, and thus providing a “shot in the arm” has value. My intention was not to “needle you”, but rather take a “jab” at the current undervalued research. I know the pun thing is not healthy, but I love it too much to quit and everyone needs a hobby.

References:
1. Moyad MA. Adult preventive vaccines with other synergistic lifestyle options: is it time to add these ancillary benefits to the overall AS management checklist? World J Urol. May 7; 1-7, 2021.
9/11 First Responders Face Higher Cancer Risk 20 Years Later (Continued from page 1)

“This implies that when we have a disaster like this, we may want to establish surveillance sooner,” Hall said.

The other study compared New York City firefighters who responded on 9/11 with firefighters in other big U.S. cities. It found that compared with their colleagues, 9/11 firefighters had a 13% higher risk of developing any type of cancer over the next 15 years.

Two specific cancers stood out: New York City firefighters had more than double the risk of thyroid cancer, and a 39% higher risk of PCa. They were also typically a suggested annual subscription donation of $35 for 12 issues (includes shipping and handling).

As it stands, though, there are no special screening recommendations for World Trade Center responders or survivors. “They’re identical to what’s advised for the public in general,” said Calvert, who wrote an editorial published with the studies. When it comes to PCa screening, men aged 55 to 69 are generally advised to talk to their doctor about whether it’s right for them.

In the new study that focused on PCa, Hall’s team looked at data on nearly 54,400 men who responded to the World Trade Center disaster—including firefighters, police, paramedics, construction workers, volunteers, and clean-up workers. Overall, 1,120 men were diagnosed with PCa through 2015. Up until 2006, responders’ risk of the disease was no greater than that of New York State men in general. But that changed starting in 2007, when their risk rose to be 24% higher than the norm. And firefighters who’d arrived the morning of 9/11 appeared to be at greater risk than workers who arrived later.

Hall said that’s suggestive of a “real effect” of exposure to the toxic plume at the site. “The massive cloud is known to have contained cancer-causing substances such as dioxins, asbestos, benzene, and polychlorinated biphenyls (PCBs),” Hall noted.

He advised 9/11 responders to get into the health monitoring program if they haven’t already. “There’s no reason not to, even if you’re healthy—or especially if you are [not],” Hall said.

Calvert said the program “remains steadfast in its mission.”

“Among the [program’s] successes is its efforts to ensure excellence and efficiency in the delivery of medical monitoring and treatment, for both physical and mental health conditions related to 9/11 exposures,” he said.

HealthDay News
13 September 2021

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PAGE 8
QUESTION FROM PROSTATE CANCER SURVIVOR:
Does prostate surgery decrease sex drive and testosterone levels?

RESPONSE FROM DR. JEFFREY ALBAUGH:
Thank you for your excellent question. The surgery itself does not have a direct impact on your sex drive or testosterone. Most men have surgery alone as a primary therapy to treat prostate cancer. The exception is if you are also taking androgen deprivation therapy (ADT), a testosterone lowering treatment most often done through injections. Testosterone is produced primarily by your testicles and the prostate surgery doesn’t involve the testicles, but rather the removal of the prostate and seminal vesicle. Many men continue to have a strong sex drive after prostate cancer surgery since the surgery doesn’t impact testosterone. Dealing with erectile dysfunction through the use of timing pills, vacuum devices, or injections can impact your sex drive though. These added layers to the sexual experience can impact spontaneity as well as sex drive. In can be helpful to try and integrate or incorporate the erectile dysfunction treatment (for example the vacuum device) into love play with your partner, but the treatments can still add unwanted steps to the sexual experience.


Watch Dr. Albaugh’s presentation on sexual health and intimacy from the Prostate Cancer Pathways for Patients and Caregivers event recorded at NorthShore University HealthSystem in Skokie, IL on November 3, 2018 at https://www.youtube.com/watch?v=Hiq0dDEb1l0&t=4483s.

Read previous issues of Between the Sheets at www.ustoo.org/BTS.

Do you have a question about sexual health or intimacy? If so, we invite you to send it to Us TOO. We’ll select questions to feature in future Between the Sheets columns.

Please email your question to: ustooBTS@ustoo.org

Or mail your letter to:
Us TOO International
Between the Sheets
2720 S. River Road, Suite 112
Des Plaines, IL 0018
ZERO360: Comprehensive Patient Support
1-844-244-1309 (Toll-Free) zerocancer.org/zero360

ZERO360 is a free, comprehensive patient support service that helps patients navigate insurance, find financial aid resources, connect with support services, and secure access to care. ZERO's experienced case managers are ready to help men and their families through their personal prostate cancer journeys.

“Make two lists: one of the things you need help with, and a list of people you need to talk to.”
- Rallie Settles, Patient

Us TOO Support Groups zerocancer.org/supportgroups

Us TOO Support Groups offer in-person and virtual support for those affected by prostate cancer. These groups, led by local Support Group Leaders, meet regularly to provide peer support, resources, and education to empower men to make informed decisions on testing, treatment, and management of side effects. Groups are also available for special interests, including: Veterans, Black Men, Gay Men and their Partners (All LGBTQIA+ welcome), Caregivers, Spanish Language, Deaf Men, and others.

Online Support Services

A variety of online support services are available to help men affected by prostate cancer and their loved ones to connect with others who are going through, or have gone through, similar situations. ZERO Connect is a Facebook-based support group for participants to share stories, ask questions, and connect. Invite-only Facebook groups also exist for Caregivers and Black Men. The Inspire Online Support Community (ustoo.inspire.com) connects patients, families, friends, and caregivers to enhance the quality of life for all those affected by prostate cancer.

Peer Support

MENtor is a peer support network at zerocancer.org/mentor for anyone who has received a prostate cancer diagnosis or has experienced a recurrence. ZERO's trained, volunteer MENtors represent many different prostate cancer journeys and have a wealth of insights to share based on their experiences. The ZERO Caregiver Connector Program at zerocancer.org/caregiver-connector matches prostate cancer caregivers with others who have been in similar situations. Both MENtors and Caregiver Connectors provide valuable one-to-one support customized to meet individual needs.

ZERO Drive zerocancer.org/drive

Transportation-related financial assistance is available to prostate cancer patients currently undergoing treatment, receiving follow-up care, or attending ongoing provider appointments due to a prostate cancer diagnosis.* Check the website to see if ZERO Drive is available in your state. More states will be added to the program soon. *While funds are available.

Educational Resources zerocancer.org

ZERO offers a variety of educational resources for prostate cancer awareness, early detection, screening, treatment, and side effects. Literature is available in print and digital format and webinars featuring prostate cancer experts are scheduled regularly. Each year, the ZERO Prostate Cancer Summit brings patients, caregivers, and advocates together to hear the latest information from prostate cancer experts.