Three questions for Dr. Timur Mitin

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What's been the most interesting development in your area in the last two years?

Organ preservation is a major leitmotif in the field of oncology over the past several decades. Many important randomized clinical trials have dramatically changed the standards of care in the world. For example, radical mastectomy for patients with breast cancer, developed by Dr. Halsted in 1882, was the standard treatment until the mid-1970s. Several randomized trials have established that breast conservation surgery, especially with adjuvant systemic and local radiation therapies, achieve the equivalent outcomes. Women with breast cancer are now counseled that they have an option to choose between mastectomy and breast conservation surgery. Other randomized trials have established organ preservation as a standard of care for extremity sarcoma and laryngeal cancer.

Some randomized clinical trials have not yet been published. In 2016 the world is eagerly awaiting the results of a UK trial ProtecT, which randomized men with localized prostate cancer to undergo prostatectomy, radiation therapy or active surveillance. Until then, largely based on solid evidence from retrospective studies, there is a clinical equipoise and physicians discuss with patients that surgery and radiation therapy are equivalent treatment modalities for localized prostate cancer.

Bladder cancer is another malignancy where bladder removal – cystectomy – should be compared in a head to head clinical trial to bladder preservation treatment modality, which incorporates maximal resection of the tumor (without bladder removal), radiation therapy and chemotherapy. Over the past

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40 years thousands of patients were treated on carefully designed multi-institutional clinical trials in the United States and Europe, showing that over 70 percent of patients can avoid cystectomies, while the ultimate survival outcomes are comparable to those presented in surgical series. Bladder preservation treatment is more common in Europe than in the United States, but even in England with national healthcare, a randomized phase III SPARE (Selective Bladder Preservation Against Radical Excision) trial has failed to accrue patients.

Nevertheless, the NCCN (National Comprehensive Cancer Network) guidelines were modified in 2013 to indicate that trimodality bladder preservation treatment algorithm is an acceptable alternative to cystectomy for patients who are otherwise healthy and fit to undergo surgery. This is an important development for patients with bladder cancer, since it is no longer ethical and acceptable to tell patients with bladder cancer that cystectomy is the only standard of care, and balanced discussion of treatment options is as critical as it is for patients with breast, laryngeal and prostate cancers.

**What is the most important aspect of support that OHSU provides to you currently and how would you like this or other support to grow in the future?**

My experience at Massachusetts General Hospital, where I received my training and then stayed as a faculty member for several years, before coming to OHSU, taught me that patients need to be evaluated in multi-disciplinary clinics, with several physicians from different specialties being present in the same room at the same time with a patient who has just received a new diagnosis of cancer. This is a critical moment when a patient feels the most vulnerable and looks for a balanced discussion of various treatment options. Sending a patient (or not) to other providers is not nearly as comforting and educational as meeting the entire team of providers in the same room.

I hope that OHSU continues to lead in seeing new patients in multi-disciplinary clinics, whether patients have choices in treatments, such as prostate, bladder, lung, head and neck malignancies, or patients need all treatment modalities for the best outcomes, such as brain, esophageal or rectal malignancies.

**A hypothetical: If you could have one tool that would solve a seemingly impenetrable problem in your work, what would it do? You have unlimited resources to design this tool, so think big.**

Our current treatment approach for patients with new diagnoses of many malignancies is based on guidelines. This means that all patients are expected to receive the same course of treatment, which has been established in clinical trials to achieve the best treatment outcomes. However, we know that while some patients do well with these treatment algorithms, some don’t. The current treatment approach can be compared to roadmaps, which indicate several potential routes between two points on a map. The maps are rarely updated, they don’t specify which vehicle is best for which road, they incorporate no information about current traffic or road construction – they just provide a rough guide to drivers. This is where we were behind the wheel 10 years ago, and this is exactly where we are with clinical treatment decisions and algorithm for cancer patients today.

Where could we be with cancer care in the next 10 or 20 years? If we could use each patient’s experience with detailed information about clinical status, biological markers – and use this information

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to shape the clinical decision for the next patient with the same clinical status and biological markers – we would have an equivalent of a real-time GPS system that maps the best route between two points, while accounting for up-to-date traffic information and even offering options based on costs (toll vs free roads), and personal preference (highways vs slow and scenic back roads). This would require a complete revamping of the clinical trial structures, abandoning clinical care guidelines and using every single patient everywhere in the country to dictate the choice of treatments for the next patients. Can we get there? OHSU is in an amazing position to collaborate with leading technology companies to embark on a new cancer treatment paradigm. Could $1 billion help us get there? I would like to think so.

About Three Questions

This Q&A series features OHSU School of Medicine faculty members talking about their work with the goal of getting to know them and different areas across the school. View more.

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