EDITORIAL

When is cancer not a cancer? The prostate cancer debate.

According to the National Cancer Institute, cancer is a "term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems". While prostate cancer generally fits these criterion, there may be an exception to this rule in the case of Gleason Score 6, also known as Grade Group 1, prostate cancer.

Unlike Gleason Score 7-10 prostate cancer that can invade, spread and can result in death, Gleason 6 prostate cancer is a well-differentiated cancer that is not known to locally invade or metastasize.[1] Many men develop prostate cancer as they age with many diagnosed with age-related Gleason 6 cancer that will have no impact on their life. The term "autopsy cancer" has been used to describe the presence of any prostate cancer in older men who die from other causes and were never diagnosed with prostate cancer. One of the arguments against prostate cancer screening is the over-diagnosis of these non-life threatening cancers that may result in unnecessary treatment once detected.

The discussion concerning proposed nomenclature change to remove the word cancer in Gleason Score 6 prostate cancer has been with us for over 10 years.[1,2] Several changes in the United States have rekindled this debate. A large number of men today, with some estimates of up to 70% of those newly diagnosed, are found to have Gleason 6 cancers.[3] Based on the non-aggressive nature of this cancer, active surveillance is now commonly practiced as opposed to active treatment. However, current protocols for active surveillance still require follow up testing, imaging and biopsy all of which may be unnecessary. In terms of Gleason 6 disease, this follow up is often driven by the fear that a more aggressive cancer could be missed. The man with non-life threatening Gleason 6 disease is now labeled as having been diagnosed with cancer, a life changing event.

As medical knowledge advances across many cancer types, the concept of reclassifying malignancies has taken place in other diseases. Some types of melanoma, cervical cancer, breast cancer, thyroid cancer and others have been relabeled without the ominous "cancer" moniker. Many of these reclassified tumor subtypes relate to the fact there is a high prevalence of indolent disease in many healthy individuals. Such is the case for Gleason 6 prostate cancer as well.

We have seen changes in both directions in the field of urologic oncology, towards and away from calling certain tumors "cancer". Before the advent of CT imaging, renal tumors less than 2 cm were often called renal adenomas because they did not spread beyond the kidney. During surgical procedures on the kidney, these small tumors were often noted as incidental findings. Today these are histologically and molecularly characterized as small renal cell carcinomas.

Another example of reclassification of malignancy in urology is in bladder cancer. In the early 2000's, the WHO/International Society of Urological Pathology (ISUP) consensus changed the nomenclature of a specific malignant bladder tumor. The group noted that certain bladder cancers had a negligible risk of progression and defined a new entity now known as papillary urothelial neoplasm of low malignant potential or PUNLMP.

Some alternate names for Gleason 6 prostate cancer have been proposed to avoid the "c" word. These include IDLE for indolent lesion of epithelial origin, or INERRT for indolent neoplasm rarely requiring treatment.[1,2]

As this debate of renaming Gleason 6 prostate cancer continues, a word of caution is needed. First, the renaming discussion only relates to the identification of pure Gleason 6 cancer without any other associated higher-grade disease. Next, does a Gleason 6 prostate cancer in a 50-year-old male have the same implications as the same diagnosis in an 80-year-old? Does germ line testing for prostate cancer associated mutated genes have an impact? Is there a difference between one biopsy core of Gleason 6 cancer and multiple Gleason 6 cores from the same biopsy session? Lastly, are there additional criteria that should be met to make a renamed non-life threatening cancer subtype valid without calling it a cancer such as a defined PSA level, MRI findings or a molecular marker?

Current advocates of renaming Gleason 6 prostate cancer have pointed out, such as Eggener and associates, the diagnosis of even a non-life threatening cancer in a patient can have devastating consequences on the patient and their family.[4] In the case of the diagnosis of prostate cancer, these include an increased risk of depression and suicide, insurance coverage implications, additional interventions, and higher health care costs. All of these negative consequences can also come from the diagnosis of a Gleason 6 prostate cancer that is unlikely to harm a man in his lifetime. As stated by Dr. Eggener "…if Gleason 6 cancer is biologically inert, the labeling is not…".

Leonard G. Gomella, MD
Editor-in-Chief
Philadelphia, PA, USA

References

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