



ASK DR. BOB . . .

with Dr. Bob Frank

Prostate Cancer

Doctor, should I have my PSA (prostate specific antigen) done? In the recent past, the answer that would seem obvious to many observers, both physicians and patients, was "yes". However, there are now experts in this area that are questioning the wisdom of performing routine PSA determinations as a means of diagnosing significant prostate cancer. In this article I will attempt to discuss the latest information regarding PSA and prostate cancer itself.

Prostate cancer is the number one cancer found in males, although it ranks as the number two cancer killer. While it can develop early (prostate cancer has been found in individuals at time of autopsy in their 20's and 30's), the incidence does increase with age. By age 70, 2/3 of males will have prostate cancer. The problem is many of these cancers are incidental findings, and clinical cancer may develop in only 10% of those with occult disease. Of interest, the incidence is much greater in African-American males than in white males.

Prior to the development of the PSA, when prostate cancer was diagnosed it was usually a clinically significant cancer, often resulting in eventual spread and death. With the development of the PSA, more cancers were being found when they were very small, confined to the prostate, and therefore capable of cure with surgery or radiation. What has happened with PSA and prostate cancer is very similar to what has

been seen with results of mammography and breast cancer. Initially, the controversy with PSA had to do with what values were significant for cancer. PSA is specific to the prostate organ, but not specific for cancer. It is elevated in a wide variety of other conditions, including the common BPH (benign prostatic hypertrophy) that develops in a significant percentage of individuals as they age. In the past, the cut-off value was 4.0. There have been variations developed on the PSA values, and now we use age specific values, as well as looking at the PSA velocity (how fast the PSA is increasing per year) and the percentage of free PSA. PSA circulates in the blood in both a bound and a free form, and in cancer, the free percentage is usually less than 10%, while a percentage greater than 20% is more consistent with BPH.

Widespread use of the PSA has resulted in a large number of further diagnostic procedures being performed, especially the prostate biopsy. With the biopsy, many small cancers can be found. The question is whether or not they would have developed into clinically significant cancers if left alone. The numerous prostate biopsies also brought into prominence the concept of prostate intraepithelial neoplasia (PIN), which is a possible precursor of actual cancer. High-grade PIN is looked at suspiciously while low-grade PIN is not usually felt to be serious. Some experts feel that cancers are being found that would have stayed small and confined to the prostate for the remainder of the individual's life, and the person would have died with the cancer rather than because of it. The question that remains unanswered is how to figure out which cancers would remain clinically benign and what others would be significant, requiring aggressive treatment.

Once prostate cancer is found, the most important single piece of information regarding prognosis (and

Dr. Bob continued on next page

for underwriting purposes) is the Gleason score. The Gleason score is a measurement of how aggressive or virulent the cancer may be, and it is staged anywhere from 2 through 10. Gleason scores of 7 or higher are felt to be more ominous. When diagnosed, the cancer can be treated by radical prostatectomy, or radiation given either externally or internally (brachy-therapy). There is controversy regarding which of these is the better treatment, including the optimal therapy based on a person's age. Some cancers are actually treated with "watchful waiting". When radical surgery is not performed, a problem that is encountered is that of understaging. This means that when you rely only on the results of the biopsy, then the true Gleason grade and local extent of the cancer cannot be determined. In one study, a stage was assigned to the cancer at the time of prostate biopsy, but following radical prostatectomy 2/3 of the cancers were upstaged.

Prostate cancers that are found in the elderly (age 70 or greater) are often felt to be more clinically insignificant cancers. The PSA may have more value in trying to find significant cancers in the age group 50 through 69. One also has to be concerned that men who take drugs to decrease the size of the prostate because of urinary symptoms can have up to a 50% decrease in the PSA levels.

PSA may have its most important role in determining if cancer recurs after initial treatment. When treatment, either surgery or radiation, is successful, the PSA levels fall. If later on they begin to rise, this is a harbinger of recurrence of the cancer, although often it is still occult. This is referred to as PSA-only recurrence, in which the doctor knows the cancer

is back but he cannot find where it is present. It has recently been recognized that individuals with this can still live a long period of time before they finally die of prostate cancer. Some of the individuals are actually insurable with PSA-only recurrence. This is a great plus for proposed insureds and our agents, since now we can insure some individuals who previously would have been rejected. These cases have to be selected very carefully, however.

To summarize, more cancers are now being found because of the use of PSA. However, PSA is not completely specific or sensitive. It can miss cancers, and it may find cancers that would not have been clinically significant or cause death. PSA can also be elevated in many other conditions besides cancer, and many men are undergoing diagnostic procedures as a result. Both surgery and radiation can be curative, but there are troublesome side effects such as urinary incontinence and impotence. The least controversial use of the PSA is to follow an individual who has had his cancer treated to see if there is a recurrence. Even with recurrence, some of these individuals may be insurable. The full story and controversy regarding PSA and prostate cancer is not over. It may be a while before further studies actually determine the best and most precise use of the PSA. However, despite this controversy, most men between the ages of 50 and 75 are opting for PSA periodic testing. This includes yours truly.

As usual, I would be happy to answer any questions about PSA or prostate cancer or any other topic of underwriting relevance.