Prostate cancer screening with PSA testing does more harm than good

By ACSH Staff — September 3, 2014

Prostate-specific antigen (PSA) screening is a commonly ordered test, despite it being a highly debated public health practice, and despite recent recommendations which continue to condemn the screening strategy. However, despite the US Preventive Services Task Force’s (USPSTF) and other experts recommendations against routine screening, a considerable number of men are still undergoing PSA screening. The inordinately high screening rates may be due to the fact that men believe there is no downside to screening. Sadly, many doctors cling to this disproven concept.

Now, Dr. Jesse Sammon and colleagues [1] in the most recent issue of JAMA Internal Medicine argue that early PSA screening can do more harm than good. One third of American men over 80 years are screened, over 40% of men between 75 and 79 years, and one half of men between 65 and 74 years, while it has been conclusively shown that PSA screening in men over age 70 should simply never be done.

According to the Group Help Cooperative [2], PSA tests cannot determine what type of cancer a man has, or whether that cancer (if any) is or will become life-threatening. Therefore, overdiagnosis is a common result, as men are treated for cancers that are not dangerous and would never harm them. Overdiagnosis of tumors can be especially harmful as severe complications in cancer treatment can occur. For instance, prostatectomy all too often results in impotence and/or incontinence. Overdiagnosis is estimated to affect around 70% of men over 80 who have been diagnosed, and there is an estimated 50% overdiagnosis rate for men between 75 and 79 years. In a European PSA screening study, 48 men were treated for prostate cancer to prevent 1 death. In the same study, false-positives occurred in 12% of men after screening.

So what can be done to prevent unnecessary PSA screening? Many physicians choose to have a conversation with their patients about PSA screening before any intervention takes place. However, more recent recommendations suggest physicians should not offer PSA screening at all
unless the patients asks, and only then should they have the conversation, being sure to advise patients against the screening method.

ACSH's Dr. Gil Ross had this perspective: It amazes me that doctors in the U.S.A. cannot get it: the time for ordering routine screening PSA tests has passed. It seemed logical, during the 2 decades during which PSA was first discovered and added to the list of commonly-used screening tests, that finding elevated levels of this prostate antigen would be valuable in early detection of, and effective treatment of, prostate cancer the third most common cause of cancer death in men (after lung and colorectal). But as study after study has shown, the devastating harms that often flow from needless biopsies and prostatectomies, especially when done on older men who would never have had any sequelae of the cancer itself, far outweigh the few lives actually saved via earlier detection. The take-home message is clear: doctors, stop ordering routine PSAs, and talk your patients out of requesting them if they do.