Cancer screenings, overdiagnosis and an epidemic of treatment

By ACSH Staff — November 6, 2014

In November - or as it is now more commonly being referred to Movember - millions of men commit to grow moustaches to raise awareness of men’s health issues, such as prostate cancer, testicular cancer and mental health problems. One of the most important conversations which should be had this month and every other month is the one about appropriate screening tests which ones to get, and which NOT to get, etc.

Let’s discuss thyroid cancer first. An op-ed published today [1] in the New York Times by Dr. H. Gilbert Welch, professor of medicine at Dartmouth Institute for Health Policy and Clinical Practice, discusses the epidemic of diagnoses of thyroid cancer occurring in South Korea. There is no biological explanation for this epidemic. There is no new infectious agent. The explanation for this epidemic is that the government initiated a screening program meant to detect such cancers earlier and reduce its toll. Since screening for thyroid cancer is so easily done requiring merely an ultrasound of the neck many hospitals and doctors began to do this screening routinely. And surprise more thyroid cancers! But what happened to the toll of thyroid cancer subsequently? Well, that toll was vanishingly small to begin with. The fact of the matter is that many of those thyroid cancers diagnosed were small papillary thyroid cancers, which would not have been discovered during a person’s life. This results in needless stress and an epidemic of treatment, subjecting patients to lifelong thyroid replacement therapy, all for an irregularity that would not have affected the person’s health in the first place.

And then, of course, there’s prostate cancer screenings. Prostate specific antigen (PSA) screening is a commonly ordered test, despite that fact that recommendations from the Federal panel whose mandate is to recommend for or against certain screenings (the USPSTF) and other experts advise against routine screening.

According to a study published [2] in JAMA Internal Medicine, which we discussed previously, 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. Furthermore, the rates of screening vary across the country, suggesting that it may not be the patients themselves who are asking for the screening, but they are rather being done at the behest of the doctors who are ordering these tests. The fact is that this results in overdiagnosis at unacceptable rates: 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.

However, there are some cancer screenings that should be done routinely, and unfortunately those may be the ones that are not actually used. Such is the case with cervical cancer. In America, there are about 12,000 new cases of cervical cancer diagnosed every year and about 4,000 will die from the disease. Cervical cancer screening, which includes a Pap test and HPV testing should be done every three years in women beginning at 21. Those ages 30 to 65 should have HPV and Pap co-testing every five years, or a Pap test every three years, although these recommendations may vary based on certain risk factors. According to a report [3] from the CDC, about 11 percent of women ages 21 to 65 report not having been screened for cervical cancer in the last five years. Those who did not have health insurance or a primary care doctor had lower rates of screening.

CDC Principal Deputy Director Ileana Arias said, Every visit to a provider can be an opportunity to prevent cervical cancer by making sure women are referred for screening appropriately. We must increase our efforts to make sure that all women understand the importance of getting screened for cervical cancer.

ACSH’s Ariel Savransky adds, Health care providers should also use these visits to advise their adolescent patients and their parents about the importance of getting the HPV [4] vaccine, which has the potential to reduce the rate of cervical cancer and prevent unnecessary deaths from the disease. In the case of prostate and thyroid cancer screening, the science clearly shows that screening is not beneficial and will result in overdiagnosis and unnecessary medical procedures. Physicians should be aware of these facts. Also, we should note that cervical cancer is a huge problem in the third world, where screening and treatments lag well behind those we here are fortunate to have available.

As ACSH’s Dr. Gil Ross has said before when discussing PSA screening, but also relevant to thyroid cancer screening, The take-home message is clear: doctors, stop ordering routine PSAs, and talk your patients out of requesting them if they do.

And as Dr. Welch concludes in his op-ed, Too many epidemiologists concern themselves not with controlling infectious disease, but with hoping to find small health effects of environmental exposures or worse, uncertain effects of minor genetic alterations. Perhaps they should instead monitor the more important risk to human health: epidemics of medical care.