

Breast Cancer Screening

The benefits and risks of mammograms have been debated quite a bit in the past few years. In 2009, the USPSTF (United States Preventive Services Task Force) suggested that women between the ages of 40 and 49 should consider NOT getting a mammogram, and those between the ages of 50 and 69 should get a mammogram every TWO years rather than annually.

The public perception is that mammograms are unequivocally beneficial, and are good at catching breast cancer early. Unfortunately, the truth is somewhat more equivocal and nuanced.

The best literature suggests that mammograms prevent about 3 deaths from breast cancer for every 100,000 women-years (meaning, for 10,000 women screened with mammograms over 10 years, there would be 3 fewer deaths from breast cancer compared to 10,000 women NOT screened over 10 years). Statistically, this is called the ABSOLUTE benefit.

RELATIVE benefit often looks much better than absolute benefit. For example, if test helped prevent 1 death per 10,000 people screened, and the risk of death from that disease was 4 deaths per 10,000 people per year, the RELATIVE benefit is 25% (1 less death divided by 4 deaths without screening). You can see that 25% looks a heck of a lot bigger than 1 in 10,000 – that is why studies often report RELATIVE benefits – makes for better headlines.

For women aged 50 to 59, screening with mammograms reduces death from breast cancer by about 14%, and for women aged 60-69, screening reduces death from breast cancer by about 30%. For women under age 50, the benefits are smaller, and that is why the USPSTF recommends against “routine” screening – they suggest instead that screening be based upon risk assessment. A woman at very low risk of breast cancer (based upon various factors, like family history) might opt NOT to be screened, whereas a woman with very nodular breasts, a strong family history of breast cancer, and a lot of anxiety about breast cancer, might choose to be screened every year starting at age 40. You can calculate your lifetime risk of breast cancer by using a calculator found at www.drkney.com.

There is also some concern that the radiation from mammograms increases the risk of breast cancer. The dose of radiation with current mammogram machines is quite low – one mammogram provides the equivalent radiation that one would get just in background exposure over 7 weeks. A chest CAT scan would expose someone to the equivalent of 2 YEARS of background radiation. But, radiation is radiation, and many mammograms over a lifetime do increase your risk of breast cancer – so keeping them to a minimum makes sense.

I recommend that you consider your risk, as well as your level of anxiety about cancer. If you are at low risk and are not too anxious about cancer, then postponing your first mammogram to age 50, and then getting mammograms every TWO years would seem quite reasonable. On the other hand, if you are at higher risk, you might consider starting with mammograms at age 40.

The media often makes things sound black-and-white – and so do many doctors. But there is A LOT of gray in medicine (and in the world) – and we all need to learn to live with some uncertainty. The BEST approach is a healthy lifestyle – screening tests are great, but a healthy diet (lot of fruits and vegetables with little or no meat), not smoking, getting exercise every day, limiting alcohol to < 1 drink per day (for breast cancer risk – preferably NO alcohol), and keeping your weight down will do a lot more to keep you healthy than getting a mammogram.