What’s a Girl to Do?

The latest skirmishes in the mammography wars have been receiving a lot of press lately. A few years ago, the battle was being waged based on what was the best age to begin having regular mammograms. Today, the battle is over the benefits of regular screening at all! If the medical establishment is unable to reach consensus, what hope does the average woman who wants to make intelligent decisions about health care have? I certainly do not have any magic answers, and an in-depth, detailed account of the many aspects of this controversy likely would take an entire issue’s space. Watching from the sidelines, however, I can make some observations.

As so often is the case, this is a battle among statisticians, and the statistics are only as good and true as the quality of the data on which they are based. Those who discount the value of mammography in reducing mortality have done so based on a narrow selection of available studies that did not include those that the investigators deemed to be methodologically flawed. Counter arguments acknowledge that even though research flaws exist, they were not serious enough to warrant dropping the study results from consideration. In addition, the studies that were used to reach their decision included some interesting aspects of their own that can be debated. A recent editorial in CA: A Cancer Journal for Clinicians addressed some of these issues in very readable fashion (Duffy, Tabár, & Smith, 2002).

Sometimes it seems as if this is still an age-related battle. The realities of the statistics are that the risk-versus-benefit ratios become less clear the younger a woman is. The ability of annual mammograms to lower mortality rates from breast cancer is much greater in women over age 50. Evidence of benefit in premenopausal women is much “softer,” for lack of a better word. A higher incidence of false positive results and unnecessary biopsies are reported in women under age 50. Some researchers suggest that early diagnosis and treatment do not really change mortality rates but merely add three or four years onto the amount of time that a woman knows she has breast cancer. The logical extension of that thinking is that aggressive tumors will show themselves aggressively. Lower grade, more slow-growing types will show themselves in good time, presumably giving the woman a few more years before she finds out that she is living with cancer. I bet none of the researchers proposing these scenarios is a woman.

Sometimes, in all the rhetoric, I think that we lose sight of the fact that mammograms do not prevent breast cancer but rather are an important detection tool. The benefits of early detection may be more multidimensional than just measuring mortality rates might imply. Life extension is arguably the most important aspect, but we must understand all the parameters and weigh them against the risks and costs of regular mammograms.

Women and the healthcare professionals who care for them have trouble sorting through all these arguments. Our usual sources of reliable data (e.g., American Cancer Society, Oncology Nursing Society, physician organizations, patient-advocate groups), while acknowledging the need for further and continuing study, have reminded us that current guidelines should not be changed without much stronger evidence and that the public must not be misled into thinking that regular screening no longer is necessary. To abandon regular mammograms at this point is not only ill-advised but also potentially lethal. We need better clinical trials and continued efforts at early and meaningful diagnosis, not knee-jerk responses to narrowly construed but highly publicized data manipulation.

The cynic in me recognizes that the financial aspects of this controversy are not inconsequential. Managed-care organizations must be salivating at the prospect that mammography benefits could be significantly scaled back because of some purported lack of value. Recent pronouncements by the secretary of the U.S. Department of Health and Human Services that current guidelines are to be followed should help avoid precipitous changes in insurance coverage or subtle practice shifts by company doctors trying to reduce costs, but these companies will need to be watched as carefully as they watch their bottom lines.

Despite all this uncertainty, we know a few things to be true. The public needs the benefit of clear and concise statements. We may not yet be able to state unequivocally that mammograms reduce mortality, but women need to continue being screened according to accepted guidelines unless and until we have better evidence that the practice is not worth the effort. We also need to redouble our efforts to understand the causes of breast cancer so that real prevention strategies can be implemented. This will include better risk assessment and an even greater need to determine the genetic basis of this disease so that we can identify and focus on those at highest risk. Finally, we need a better understanding of the biology of this disease so that tumor lethality can be factored into the treatment equations much more precisely than at present.

Breast cancer once was automatically treated with a radical mastectomy. In the last 20 years, we have seen a remarkable shift to breast conservation surgery. This shift was supported by well-controlled clinical trials and, yes, statistics. We need to bring the same level of science to this mammography debate. “We don’t know” is not an acceptable response for those who seek our guidance and expertise. It is time we got the answers, and until we have them, we must continue to use all of the weapons at our disposal, including regular mammograms.