First, we need to look at some numbers to better understand the magnitude of the problem. In 1985 Cancer itself was the second leading cause of death in the U.S. (more than 460,000 deaths which is 22% of all deaths) behind only Heart disease (more than 770,000 deaths which is 37% of all deaths). Accidents (#4) caused 4.5% of the total deaths.

If we look at the mortality (deaths) for 1985 for the 5 leading cancer sites in women we note the following:

1) Breast cancer is the overall leader for all ages.

2) Breast cancer is #1 from age 15-54.

3) Breast cancer is #2 from age 55-75+.

4) In the 55-74 year group deaths from breast cancer are exceeded only by those from lung cancer.

5) In the 75+ age group cancer of the colon and rectum just exceeds breast as the most common cancer death.

When we look at age-adjusted cancer death rates for females from 1930-1985 we note that most rates have fallen except for lung cancer which has radically risen to greater than 27/100,000 in 1985 from a low of less than 3/100,000 in 1930. Also, breast cancer, which has always been greater than 25/100,000, is nearly 28/100,000 in 1985. This is in contrast to cancer of the uterus, which has fallen from 32/100,000 in 1930 to 7/100,000 in 1985. (See table that follows)

AGE-ADJUSTED CANCER DEATH RATES PER 100,000 (FOR FEMALES)

<table>
<thead>
<tr>
<th></th>
<th>35</th>
<th>45</th>
<th>55</th>
<th>65</th>
<th>75</th>
<th>85</th>
<th>95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>26</td>
<td>26</td>
<td>27</td>
<td>27</td>
<td>26</td>
<td>28</td>
<td>?</td>
</tr>
<tr>
<td>Uterus</td>
<td>30</td>
<td>26</td>
<td>18</td>
<td>13</td>
<td>9</td>
<td>7</td>
<td>?</td>
</tr>
<tr>
<td>Lung</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>27</td>
<td>?</td>
</tr>
<tr>
<td>Liver</td>
<td>14</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>?</td>
</tr>
<tr>
<td>stomach</td>
<td>25</td>
<td>18</td>
<td>11</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>?</td>
</tr>
<tr>
<td>Colorectal</td>
<td>25</td>
<td>27</td>
<td>24</td>
<td>22</td>
<td>20</td>
<td>17</td>
<td>?</td>
</tr>
</tbody>
</table>
Looking at how you (the patient) and I (the physician) are doing in diagnosing cancer we find that from 1979 to 1984 the diagnosis was made when the tumor was localized only 48% of the time, when it was regionally spread 43% of the time, and when it had spread distally 7% of the time.

The goal is to make the diagnosis early while the tumor is still localized as then there is a 90% 5-year survival (if you are a white female). This must be compared to only a 62% 5-year survival if the tumor has spread (metastasized) prior to the diagnosis.

O.K. so what do you and I need to do to turn these numbers around so that
1) Breast cancer falls from its lofty position as the #1 killer of women 15 to 54 years of age and the #2 killer after 54 years of age.

2) The age-adjusted death rates from Breast Cancer falls from 28/100,000 to well below 10/100,000.

For starters, I need to make sure that every female patient over the age of 20 knows how to examine her breasts and every patient over the age of 35 has a mammogram.

You need to check your own breasts monthly sometime in midcycle if you are still cyclic and you must follow-up on my recommendation for clinical examinations and mammograms. I (read your physician) will be recommending the following:

1) Up to age 40 get a clinical examination every 2 to 3 years and have, at the very least, a baseline mammogram.

2) Between the ages of 40 and 49 get a yearly clinical examination and at least an every other year mammogram. If you have a family history of breast cancer, yearly mammograms are mandated.

3) After the age of 50 get yearly clinical exams and mammograms.

Charles H. Pierce, M.D., Ph.D.