



Lions and Tigers and *Pap Smears*, Oh My!

It is a safe bet that no one looks forward to getting their annual pap smear. But a look at how this bazaar examination came about, might help one appreciate it as a lifesaving medical discovery. And while you may never look forward to a pap smear, you may realize that it is something not to miss.

As few as sixty years ago, cancer of the cervix was the number one cancer killer of women. More women died of cervical cancer than any other kind of cancer. One of the reasons it was so common and deadly was that no one looked for it. It would be found very late, when its victims were having terrible pelvic pain or horrible bleeding. A hysterectomy would be performed, but most of these women would die, because the cancer had already spread to surrounding organs.

George Papanicolaou, for whom the 'pap' smear is named, had a passionate desire to prevent these deaths. He was the first to discover that cancer cells can be found on a smear of nonliving cells from surface of the cervix and vagina.

It is both strange and remarkable that he did his first hundreds of pap smears on guinea pigs. Now, I have no idea how you get hundreds of guinea pigs to lie on their backs with their feet up in stirrups, but George Papanicolaou obviously figured it out!

Even more extraordinary is that he did his next hundreds of pap smears on his wife! Try to imagine an enthusiastic George Papanicolaou sitting at the dinner table with his wife: "Honey, I have this great idea about saving lives! Would you mind helping me out? All you have to do is...." I salute Mary Papanicolaou, a forgotten woman who went many the extra mile for millions of future women!

George Papanicolaou's original idea was to find cervical cancer early so it could be more successfully treated. The pap smear proved to be far better than he first imagined. It turned out, that women don't suddenly go from having a normal cervix to having cervical cancer. Rather, they get something in between called "**dysplasia**" (diss-play-zhah). Dysplasia progresses over the course of a few or several years from *mild*, to *moderate*, and to *severe* before becoming cancer.

When George Papanicolaou did a pap smear, he was looking for cancer cells. Today, when we do a pap smear, we look for dysplasia. It is very common. When we find it, we can easily treat it, get rid of it, and prevent women from getting cervical cancer.

The pap smear has been wonderfully effective. It has caused cervical cancer to drop from #1 on the list of cancer killers of women to #9 or #10. Today, the only women who get cervical cancer are those women who go for several years without getting their paps done. Sadly, there are many women out there who have not had a pap smear in several years. For these women, like the women of sixty years ago, cervical cancer is still #1.

May is Women's Health Month. If it has been a while, please get that pap smear done!

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