

Ask the doc February 2018:

## BCPs and Breast Cancer Risks



### Introduction:

Just when you were certain you knew the answer to a complex medical question, a new study comes out forcing you to re-think your conclusions. Such is the case with birth control pills (BCPs)(Ref.1).

As of a few months ago, there was a general consensus *among most experts* that modern low-dose BCPs were safe. To be specific, it was assumed that **taking BCPs was not associated with an increased risk of developing breast cancer**. Now, a new study published in the NEJM (Ref.1) concluded that both the low-dose (combination estrogen and progesterone) BCPs and the Mini pills (progesterone only) are associated with a **small increased risk of developing breast cancer**.

A brief overview of the history of BCPs puts the current controversy in perspective. The first oral contraceptive (Enovid) was introduced in 1960 and in 1965 the Supreme Court gave married couples the right to use BCPs. In 1972 the Supreme Court (in Baird v. Eisenstadt) legalized birth control for all citizens

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irrespective of marital status. Within a decade of their introduction there were growing concerns that the first generation BCPs pills were associated with an increased risk of breast cancer. In the 1980s a new “low dose” pill was introduced into the market.

Until now, there was a general consensus that the new “low-dose” pill was safe, or at least the **benefits outweighed the risks**. For example, there was good evidence that the pill reduces the risks of uterine and ovarian cancer in addition to its many other health benefits.

### **New Study on BCPs**

The “**new study**” was reported in the NEJM in December of 2017. It was a nation-wide study from Denmark and it includes **1.8 million women between the ages of 15 and 49 years**. **Nationwide registries** provided individually accurate information about the use of hormonal contraception. Women were followed an average of 11 years and 11,517 cases of breast cancer were identified during the period of observation. The large sample size, the length of follow-up and the ability to determine accurate information on the purchase of the pill from pharmacy records, makes for a **very impressive study**.

In essence the study concluded that there was an increased risk of developing breast cancer in women who took the pill. However, the risk was small. To put the risk in perspective, it was concluded that approximately **one extra breast cancer was diagnosed for every 7,690 women** using hormonal contraception for 1 year. The risk was increased with longer periods of exposure. There was also a risk associated with the mini-pill (progesterone only), but the risk was smaller than with the combination low-dose pill. Additionally, younger women were at lower risk. For women under 35 there was only one additional breast cancer for every 50,000 women.

### **My Take:**

The first point is that I do not prescribe BCPs. My goal is to provide readers with current information on the risks and benefits of using the pill so that they make an informed decision with their personal physician.

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My first impression in reading this article is that the benefit of taking BCPs outweighs the risk. However, I would encourage each woman to make their own interpretation of risk based on the available data. Numerous factors go into making an informed choice.

There are multiple **benefits of taking the pill**. Of course, the first is that the pill is highly effective in avoiding an unwanted pregnancy. It lowers the risk of ovarian and uterine cancer and may lower the risk of colon cancer. It also controls other conditions such as PMS, heavy periods and mood swings, etc.

One of the major limitations of the study is that it does not evaluate individual risks. I think it is reasonable to conclude that high-risk women who are BRCA positive or have a strong family history of breast cancer should have reservations about using BCPs and should consider other options (including non-hormonal IUDs or one of the barrier methods).

Another concern about the study is that it does not address the issue of controllable risk factors such as exercise, diet, body weight and alcohol consumption, etc. It is reasonable to assume that women who exercise, control their weight and otherwise live a healthy life style will have lower risks of developing breast cancer than women who ignore these healthy habits. Thus, the small added risk of taking birth control pills might be eliminated for women who follow healthy habit guidelines.

In summary, each woman should be aware of the pros and cons of the various methods of birth control and discuss her options with the prescribing doctor. Hopefully, this article will help put this complex issue in perspective. If you have questions, contact us at: [msprouse@beawarefoundation.org](mailto:msprouse@beawarefoundation.org)

### **Reference:**

1. Link NEJM article: December 2017  
<http://www.nejm.org/doi/full/10.1056/NEJMoa1700732>
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