Is Talcum Powder Safe to Use?

One doctor offers a suggestion to people who are still confused about whether baby powder causes ovarian cancer.

February 29, 2020 By Thomas J. Joseph, MD

While watching my alma mater play football on TV, during a commercial break an official-looking notice appeared on the screen. The bulletin advised that if individuals had used baby powder and developed ovarian cancer they might be entitled to financial compensation from the manufacturer. Well, what's that all about and what do you need to know?

Thomas J. Joseph, MDCourtesy of Thomas J. Joseph, MD

Over the past several years, a number of lawsuits have been filed against the Johnson & Johnson Company by women alleging that application of its talcum containing products, such as Baby Powder and Shower to Shower, to the genital area resulted in them developing ovarian cancer.

In surveys conducted as part of epidemiology studies, some women reported that they used a dusting of talcum to help refresh the genital area. The powder's moisture-absorbing and friction-reducing properties kept the skin dry, prevented chafing, and, as such, was a common component

in feminine hygiene products.

In addition, a number of participants also reported using talcum powder on condoms, diaphragms and sanitary napkins.

But what is talcum? Talc is a mineral similar in composition to asbestos, a well-recognized, cancer-causing agent in malignancies of the lung and its surrounding membrane layer, the mesothelium. As talc is found together with asbestos in geologic formations, mined talc is often contaminated with asbestos. When talc is finely ground, talcum—the major ingredient in these powders—is produced.

Additionally, it has been well documented that both the talc and asbestos in these powders can migrate from the vagina through the openings of the cervix, uterus and Fallopian tubes and lodge in the ovaries, where they can cause an inflammatory reaction.

These ovary-embedded talc crystals are seen as brightly-shining particles under the microscope. Scientists theorize that it is the asbestos contaminate or long-standing inflammation that initiates the malignancy.

How common is ovarian cancer? Statistically, one in every 75, or 1.3% of women in the United States will develop ovarian cancer over the course of their lifetime. Admittedly, this figure pales in comparison with women's 12% lifetime risk for breast cancer. But, unfortunately, unlike breast cancer, where self-examination, mammography and ultrasound screening have resulted in earlier detection and reduced mortality, presently there are no recommended reliable screening tests available to detect ovarian cancers. Subsequently, these tumors are diagnosed at later stages and result in a higher mortality rate for women than breast cancers.

In medical literature, there are dozens of case-control studies on talcum use and ovarian cancer for which researchers recruited two large groups of women participants. (These studies compared individuals with the disease with those who did not have the illness.) Women with ovarian cancers made up the "cases" and those without the illness were the "control" group. Scientists asked the women whether they used talcum powder and if so to what areas of the body they applied it.

Studies that involved U.S. female populations in general revealed that those who reported using talcum powder on their genital area exhibited a 30% higher rate of serous carcinoma—a specific type of ovarian cancer—than women who did not. (This usage of talcum powder resulted in women experiencing a 1.7% chance of developing the disease compared with individuals who weren't using the powder and faced a 1.3% risk of getting ovarian cancer.)

When inquiries were confined solely to Black women, the results were also disturbing. The 2016 African American Cancer Epidemiology Study revealed that Black women's use of talcum powder on their genitals—and elsewhere—was associated with an increased risk of an invasive type of cancer called epithelial ovarian cancer when compared with others who didn't use this powder.

In addition, according to a separate study in the journal Epidemiology, women who used the powder but had been sterilized by either tubal ligation or hysterectomy prior to menopause were at risk of developing ovarian cancer more in keeping with the rate of those in the group that didn't use talcum.

Researchers suggest that since the powder didn't reach the ovaries of women in this group, cancers did not form. What's more, for as yet unknown reasons, women on hormone replacement therapy for menopausal symptoms were also at a lower risk for developing ovarian cancers.

In the meantime, the consumer health care industry has worked diligently to remove asbestos from talcum powder. Encouragingly, the results of a 2009 survey of cosmetic grade talc conducted by the Food and Drug Administration failed to detect any asbestos contamination. Now, most baby and body powders are made with cornstarch, a safe and effective alternative to talc that has not been associated with causing cancer.

What have juries decided? The 2019 Talc Litigation Group reports that since 2013—when the first case against Johnson & Johnson was won because of its failure to warn customers of the potential cancer risk from use of its product—there have been six additional courtroom cases against the pharmaceutical company. Juries ruled in favor of the plaintiffs in all but one proceeding. (One financial award was reportedly an astounding $4.7 billion.)

What's the takeaway? Although talcum powder is by no means the cause of most ovarian cancers, the scientific evidence has consistently shown an increased risk, albeit small, between the use of genital talcum powder and serous ovarian cancers.

Astonishingly, Johnson & Johnson has been marketing its Baby Powder since 1894, so one can hardly fathom the untold number of lives that were adversely affected over the past 120 years.

Despite lingering questions as to what in the powder may cause cancer and by what mechanism this happens, individuals can undertake the most prudent course by asking themselves one key question: Why run the risk?

Thomas J. Joseph, MD, a graduate of Temple University School of Medicine, is a board-certified anatomic and clinical pathologist who practiced in the U.S. Navy and served as a laboratory director prior to his retirement in 2010. He has authored a number of peer-reviewed articles in medical journals. He continues to be involved in medical education as a professor in a nursing program. He enjoys traveling and watercolor painting and, more recently, helping to care for his newly minted twin grandsons, Curtis and Wesley.
