

Chemicals used in hair straightening may increase the risk of uterine cancer.

Christine Lehmann*

Department of Obstetrics and Gynecology, Medical University of Innsbruck, Innsbruck, Austria

Abstract

A new study from the National Institutes of Health found that women who used chemical hair straightening products had a greater chance of developing uterine cancer than women who did not disclose using these products. Other hair products, such as hair colors, bleach, highlights, or perms, that the women reported using were not linked to uterine cancer, according to the study.

Keywords: Uterine Cancer, Oncology, Tumor, Alopecia

Introduction

A study conducted by the National Institute of Environmental Health Sciences (NIEHS), a division of the National Institutes of Health (NIH), to identify risk factors for breast cancer and other health conditions includes 33,497 American women between the ages of 35 and 74 who participated in the Sister Study. 378 uterine cancer cases were diagnosed over the course of the women's roughly 11-year follow-up. Researchers discovered that women who frequently used hair straightening products—defined as using them more than four times in the previous year—had a greater than twofold increased risk of developing uterine cancer [1].

By the age of 70, it was predicted that 1.64 percent of women who had never used hair straighteners would develop uterine cancer; however, the risk increased to 4.0 percent for heavy users, the study's lead author and director of the NIEHS Environment and Cancer Epidemiology group. "This rate of doubling is alarming. But it's crucial to put this information into perspective — A relatively uncommon form of cancer is uterine cancer [2].

With 65,950 expected new cases in 2022, uterine cancer is the most prevalent cancer of the female reproductive system and accounts for nearly 3% of all new cancer cases. According to studies, uterine cancer incidence rates have been rising in the US, especially among Black women. According to a study published in the Journal of the National Cancer Institute, self-identified Black women made up almost 60% of the participants who admitted to using straighteners in the previous year. Despite the fact that the study did not identify a difference in uterine cancer incidence according to race, the negative health impacts may be more severe for Black women due to a higher prevalence of usage [3].

The results are in line with earlier research that suggested women's use hair straighteners may raise their chance of

developing malignancies linked to hormones. The brands or contents of the hair products the women used were not gathered by the researchers. The authors of the paper do, however, mention that a number of substances that have been linked to uterine cancer risk (including parabens, bisphenol A, metals, and formaldehyde) have been discovered in straighteners. Due to increased scalp absorption from using hair products, particularly straighteners, which may be aggravated by burns and lesions from using them, chemical exposure from using hair products, especially straighteners, may be more worrying than from using other personal care items [4].

In the past, data from the Sister Study have been used to investigate potential connections between hair products and various diseases, particularly tumours that respond to hormones. This covers uterine, breast, and ovarian cancers as well. Endometrial cancers, which begin in the uterine lining, account for the great majority of uterine malignancies, or tumours that begin in the uterus. Specific of the chemicals used in hair products may be absorbed through the scalp and have estrogen-like effects in the body, raising concerns about potential linkages between some hair products and these cancers. Some hair products may potentially include formaldehyde and other chemicals linked to cancer [5].

Conclusion

Hazardous substances with endocrine-disrupting and carcinogenic effects may be present in hair products. Previous research has linked the use of hair products to an increased risk of hormone-sensitive cancers, such as breast and ovarian cancer; to our knowledge, no prior research has looked into the connection with uterine cancer.

References

1. Siegel RL, Miller KD, Goding Sauer A, et al. Colorectal cancer statistics, 2020. *Ca Cancer J Clin.* 2020;70(3):145-64.

*Correspondence to: Christine Lehmann. Department of Obstetrics and Gynecology, Medical University of Innsbruck, Innsbruck, Austria, E-mail: c.brunner@tirol-kliniken.at

Received: 25-Jan-2023, Manuscript No. AAMOR-23-89311; Editor assigned: 27-Jan-2023, PreQC No. AAMOR-23-89311(PQ); Reviewed: 10-Feb-2023, QC No. AAMOR-23-89311;

Revised: 15-Feb-2023, Manuscript No. AAMOR-23-89311(R); Published: 22-Feb-2023, DOI:10.35841/aamor-7.2.168

2. Liang J, Shang Y. Estrogen and cancer. *Annu Rev Physiol.* 2013;75:225-40.
3. Rodriguez AC, Blanchard Z, Maurer KA, et al. Estrogen signaling in endometrial cancer: a key oncogenic pathway with several open questions. *Horm Cancer.* 2019;10:51-63.
4. Crews D, McLachlan JA. Epigenetics, evolution, endocrine disruption, health, and disease. *Endocrinology.* 2006;147(6):s4-10.
5. Nowak K, Ratajczak-Wrona W, Górska M, et al. Parabens and their effects on the endocrine system. *Mol Cell Endocrinol.* 2018;474:238-51.