### Hereditary Breast cancer risk and management

A study on the risk of breast cancer was conducted along with the research on the management of individuals who are unaffected but are vulnerable to non-BRCA hereditary breast cancer.

Boston (December 23, 2021) – After a thorough study, the researchers have found that out of total people suffering from breast cancer about 5% - 10% of people got it from heredity. Most of the females suffering from hereditary breast cancer (HBC) are found to have BRCA1 and BRCA2 genes. If a female has inherited any one of these two genes or a mutated copy, then she has a very high chance of suffering from the HBC by the time when she is 80. However, many females despite not inheriting the BRCA1 and BRCA2 genes from their parents, suffer from breast cancer because of mutation of genes like TP53, PALB2, PTEN, and some others. The probability of suffering from breast cancer solely depends on the genes and their level of vulnerability.

The description of the genes and the chances of lifetime breast cancer risk associated with those genes have been given in the article titled “Risk for breast cancer and management of unaffected individuals with non-BRCA hereditary breast cancer”. This article was published in The Beast Journal on 12 December 2019. The research and study on this article were done by the professionals like Marie E. Wood MD, Wendy McKinnon MS, Judy Garber MD, MPS, and a few others. University of Vermont College of Medicine and Dana-Faber Cancer Institute of Harvard Law School was also part of this research. The data presented in this article are obtained from the research of multiple resources of the past few years.

The high penetrant genes not only make the female vulnerable to breast cancer but also other cancers like adrenal cortical cancer, brain cancer, pancreatic, and ovarian cancer, etc. The mutation of genes causes a higher risk of cancer for some female while some doesn’t suffer. However, the chances of suffering from HBC are very high from the mutation of risky penetrant genes. More precisely, the lifetime risk of suffering from HBC for a female having mutated high penetrant genes ranges from 27% to 85% depending upon the types of genes.

Since women are very vulnerable to breast cancer, it is very important to make them self-aware about breasts cancers by providing the necessary information about the significant tools that are used for the screening and prevention of breast cancer. Many women who are aware of such screening tools have prevented themselves from the risks of breast cancer by early detection and taking preventive measures.

Chemoprevention is quite an effective option for women having the highly and moderately risky genes to prevent themselves from hereditary breast cancer. As per the research, the rate of breast cancer has decreased significantly by taking the proper therapies of chemoprevention using endocrines like aromatase and tamoxifen. In addition, Mastectomy has also shown very positive results in decreasing the cases of breast cancer on the female having the BRCA genes or its mutated forms and it has also shown a positive result for women with a long history of breast cancer. The survival rate of a breast cancer patient has significantly increased because of the proper application of mastectomy. Likewise, bilateral salpingo-oophorectomy (BSO) has also decreased the risk of not only ovarian cancer but also breast cancer. However, BSO is only recommended if there are chances of suffering from ovarian cancer.

Women are very vulnerable to breast cancer because of inherited genes or their mutated form. So, to prevent self from the risks of breast cancer, women need to be aware of the screening tools that have a great advantage in reducing the risk of breast cancer.

The full journal article can be found at https://onlinelibrary.wiley.com/doi/abs/10.1111/tbj.13969.

The Breast Journal is an internationally renowned journal that provides research papers and facts about breast cancer and other breast-related diseases. This journal has published numerous articles and research papers related to the topics of the breast including information like prevention, psychological issues, early detection, therapy and diagnosis, risk factors, and biology of breast cancer. The Breast Journal is partnered with Wiley and Hindawi brands.