

Our Hormones are Locomotive in the Development of Cancer in Ourcells

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Our cell consist of atoms/molecules and this cells are often called the “building blocks of life”. Normal development and cell differentiation, genes are organized and managed is a biological process. When the cell genetic change and this regulation is broken, malignant appearance is come out. Therefore, to understand the mechanisms that cause cancer and the cancer are primarily useful to review the normal cell cycle and this regulation. Some events, converts normal cells are transformed cells, and is a model for the processes involved in tumor formation. Many genetic changes are usually required for cancer development. In some rare cases with Mendelian inheritance also inherited predisposition to cancer.

Although additional changes are needed for cancer development is to be important, though sometimes a single genetic change. Cancer cells; uncontrolled proliferation, differentiation, blocking, reduced apoptosis, to cause the characteristics of cancer cells, such as altered tissue architecture or enhanced activity of these pathways have been inactivated. Some “pathways of cancer”, while included in the specific type of cancer, may have a critical role in a wide range of other malignant tumors.

Each cellular regulatory system can be improved as a defining formula to avoid thinking as a cancer pathway: A “cancer pathway” is at least one cellular regulator system required a genetic mutation or epigenetic activation or inactivation for the development of human cancer. Typically cancer pathways in individuals with a cancer type or different types of cancers can arise from changes in the different components of the same regulator system. For years the scientific community looking to cure cancer, although studies continue to be promoted with each passing day, we need still time to bring tangible results. Because every day with

a different cancer cells, it is possible to experience a different part of the body.

Overcome any cancer drugs taken from outside the body, let alone to investigate ways, we discuss ways to defeat cancer will produce our natural weapons of our own. Because the development of cancer cells, hormone regulation and associated pathways are extremely important. According to the studies carcinogenesis development triggered genes/proteins due to mutations that occur in the hormones or agents identified as positive marker particular hormone positive disease is the biggest problem in resistance treatment given time. For example, certain breast cancer cells, they contain hormone receptors via may be responsive to estrogen.

That is, estrogen may lead to increased growth and cancer cells. The hormone therapy purposes, the estrogen receptor and thus in the types of cancers that are sensitive to these hormones, preventing the development of cancer by eliminating the effect of estrogen is to interrupt the resistance to uncontrolled cell division. Today began to be illuminated reasons underlying this resistance mechanism.

When anti-hormone drug to a number of smart drugs are added, the resistance was observed to be inhibited or delayed. Because smart drugs hormone has led to increasing efficiency in conjunction with individual medical treatment. For example; Leptin is secreted from adipose tissue insulin resistance in obesity and also has the effect of hormones such as adiponectin. The research of the leptin receptor in cancer cells revealed that more number of adiponectin receptors. Molecular effects of adipokines in obesity-cancer relationship gradually determined that serum leptin/adiponectin level is considered as an important parameter.

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It is important in cancer cases in nutrigenomics approach. For example, broccoli, mustard, cabbage, watercress and benzyl isothiocyanate found abundantly in cruciferous (BITC) acts on the molecules such as leptin provides inhibition of cancer growth. Increasing the amount of aggressive cancer in serum adiponectin suppresses the metastatic properties of cancer cells to conventional chemotherapy can help.

Furthermore, the development of cancer in the circadian timing system is also the mechanisms which control and regulation of hormone secretion is also extremely important. This rhythm mechanism in living cellular structure/differentiation and is effective at the molecular level.

When cell division, DNA repair and apoptosis providing editing suicidal cell death but also an effect on the metabolic pathways that play a role in cancer development and function. Sleep and eating habits, heart rate, including body temperature and hormone production, which controls several special biological function of the time "time-related" are our genes. The molecular clock, or the bio-pharmaceutical their goals

and the disabled, the area under control in a certain rhythm control regions of genes that regulate the cell cycle consists of 15 hours of genes interact with each other.

To get caught or preventive measures for cancer; We need to keep our hormone primarily controls.

Because hunger / satiety; laugh/cry; As can even smile smiling happy life is to lead our hormones.

As all of humanity; optimistic and positive approach hoping to look to the future with a smile full of laughter...

HIGHLIGHTS

- Genetic susceptibility of individuals
- Epigenetic factors
- Nutrigenomics
- Hormon regulation and cell signaling mechanisms
- Molecular clock in cells
- Not being caught cancer, the fear of being late treatment !**

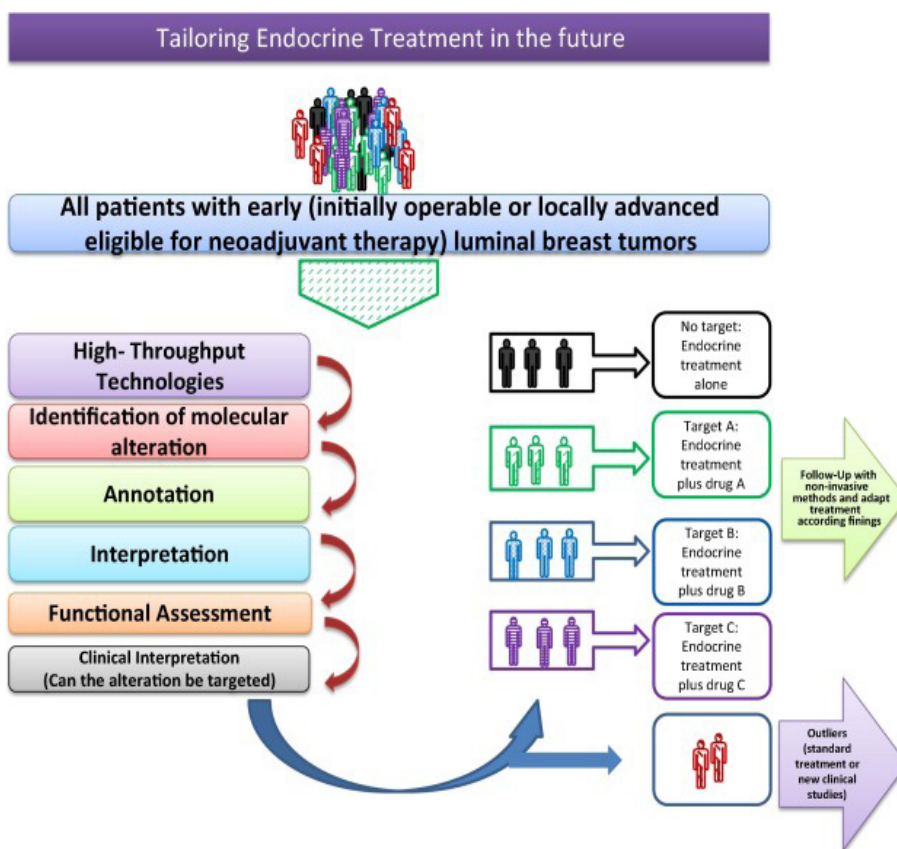


Figure 1. Hormone treatment is important in cancer cases

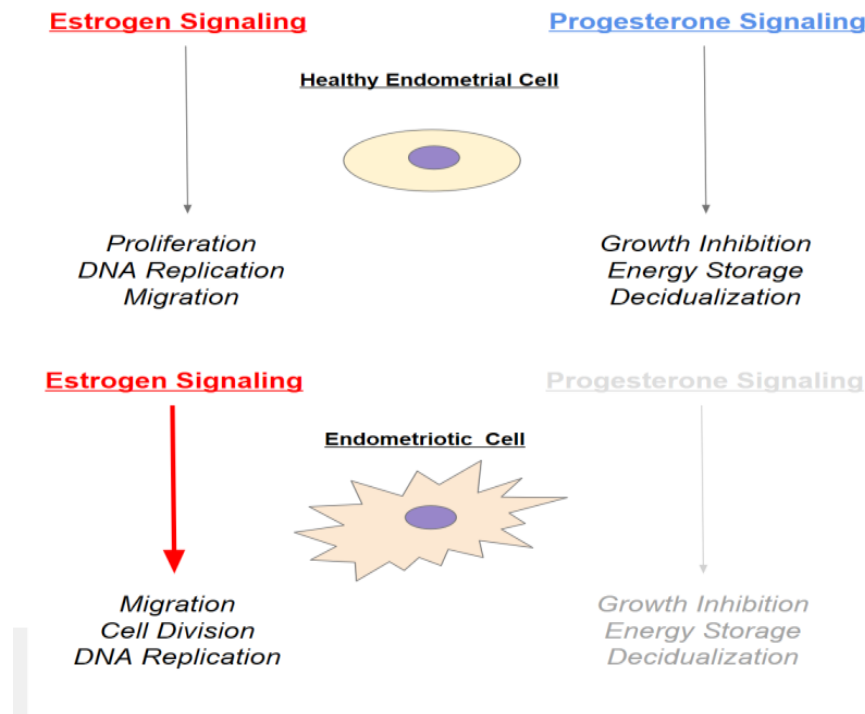


Figure 2. The estrogen and progesterone hormones related to cancer

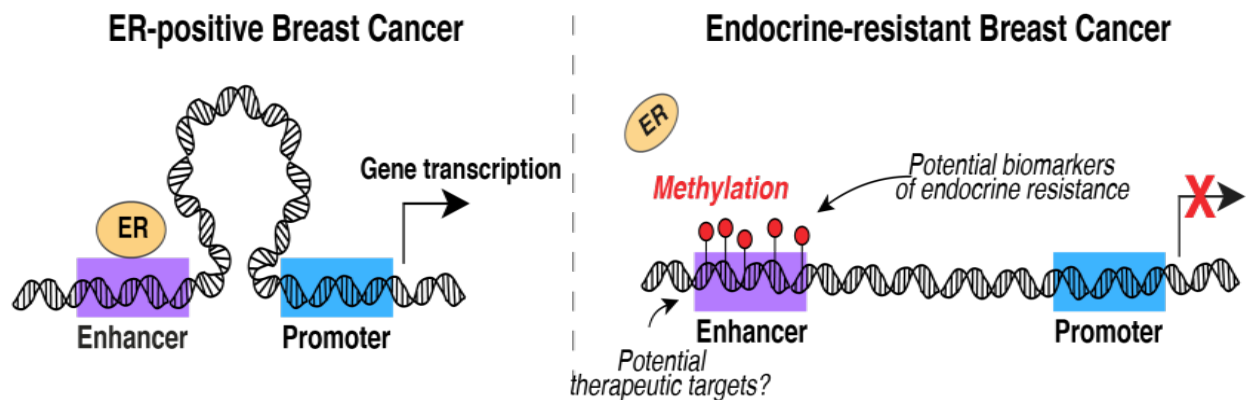


Figure 3. The endocrine resistant and methylation in breast cancer

Note: All figures in this manuscript obtained from various literatures

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