Healing Cancer at the Root
HYPERION
Functional Medicine



OVARIAN CANCER & SEDENTARY LIFESTYLE

Ovarian cancer is the eighth most common cancer in women worldwide, with 295,414 incident cases and 184,799 deaths in 2018[1]. Ovarian cancer is often detected at an advanced stage, which results in poor survival rates due to non-specific symptoms and a lack of effective screening methods.

Because ovarian cancers are often detected at late stages, the role of the risk factors are getting more attention. Sedentary behavior has been studied as a cause. Seven studies including 2060 ovarian cancer cases were evaluated. Comparing highest versus lowest levels of sedentary behavior, a statistically significant increase in the risk of ovarian cancer in relation to prolonged sitting time was identified[2].

High levels of sedentary behavior subsequently have led patients to gain weight and become obese. Current literature indicates that obesity not only increases the risk of ovarian cancer by itself but may also act as an intermediate variable linking sedentary behavior to ovarian cancer[3]. As discussed in the sedentary lifestyle cancer root tab, sedentary behavior and obesity are associated with a rise in sex hormones: estrogen and its metabolites which are produced by fatty tissue. This likely facilitates the development and progression of ovarian cancer through effects I understand, that increase cancer cell division and DNA mutations[4]. We know that sedentary behavior leads to obesity-related insulin resistance, higher circulating levels of insulin and glucose, and enhancement of insulin-like growth factor 1 (IGF-1), these factors are likely to boost cancer growth through involvement in cancer cell differentiation, cancer cell proliferation and resistance to cell death[5].

Chronic inflammation because of sedentary behavior and obesity from dysfunctional adipose tissue and an increase in inflammatory factors, such as C-reactive protein (CRP) are likely to promote cancer development[6].

Importance of Exercise in Patients with Ovarian Cancer

Oxygenation can inhibit the growth of ovarian tumors by reducing the regulation of cell proliferation and survival genes. Ovarian cancer cells do not like oxygen. Ovarian tumor cells adapt to low oxygen levels and gain a survival advantage. Hypoxia or low oxygen can also affect how ovarian cancer cells respond to chemotherapy and immunotherapy[7 8].

Engaging in endurance and resistance exercises, as well as maintaining an active lifestyle, can improve the functioning of mitochondria and has been shown to decrease the risk of cancer[9]. Metabolic dysfunction plays a role in many types of cancers. Disruption of glucose metabolism is associated with higher cancer recurrence rates and reduced survival. Health benefits from exercise during and after cancer treatment improve survival[10].

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Hyperion Functional Medicine orders detailed lab testing for all cancer patients to identify and treat insulin resistance, hyperinsulinemia, resulting metabolic syndrome, and inflammation, all are drivers of cancer.

A patient centered exercise and nutrition plan targeting weight loss, if needed, is a part of all Hyperion Functional Medicine cancer treatment protocols and is optimized and personalized for each cancer patient.

CANCER ROOTS
Collaborating for a Cure

In partnership with healingstrong

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