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The Treatment and Epidemiology of Colon Cancer

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ABSTRACT
Treating cancer is done in many methods. This paper gives one of the methods of treating cancer using epidemiology. This gives one of the best results.

KEYWORDS: cancer, Epidemiology.

TREATMENT

Whereas no single treatment for cancer has been established, colon cancer has been addressed using common options of radiation therapy, chemotherapy, and surgery. Regarding surgical procedures, either a section or the entire colon is removed; a process referred to as colectomy (Brearley et al., 2011). Apart from the colon section containing cancer, marginal areas, and lymph nodes in the neighborhood are also removed. Chemotherapy is adopted when chemicals perceived to interrupt the process of cell division are used to kill or damage cancer cells. The procedure targets rapidly dividing cells and applies in situations where cancer has spread, as the medicines travel in the whole body. Notably, chemotherapy is done in cycles to allow time for the body to heal between the doses administered. However, the side effects of chemotherapy include vomiting, fatigue, loss of hair, and nausea (Hershman, Lacchetti&Dworkinet al., 2014). Lastly, radiotherapy or radiation treatment is used to destroy cancer using high-energy cells. Through radiation, molecules that form cancer cells are killed or damaged. High-energy x-rays and metals such as radium are used to emit the high-energy gamma-rays responsible for destroying or shrinking the tumors, especially in the late stage cancers. Some of the side effects of radiotherapy include mild skin changes to resemble suntan or sunburn, fatigue, diarrhea, vomiting, and nausea.

Figure 3: Statistical illustration of colon cancer

Source: Siegel et al. (2012)

Epidemiology

The prevalence and incidence of colon cancer is evidenced by the earlier affirmation that it forms the second leading cause of mortalities attributed to cancers; especially in the U.S. context. These statistical outcomes reflect data combinations for information about men and women. From a diagnostic perspective, colon cancer comes in third position among different types of cancers. Based on recent observations by the American Cancer Society, the total number of individuals who are likely to be diagnosed with this condition stands at 136,830. Out

of these, the Society predicts 50,310 deaths. Of importance to note is that there exist differences in risk factors, but at least one in every 20 individuals is likely to be diagnosed with colon cancer (Kushi, Doyle & McCullough et al., 2012). Regarding the aspect of life expectancy, it remains notable that individuals who develop colon cancer are likely to exhibit a reduction in the survival rate; documented to be five years (Hershman, Lacchetti&Dworkinet al., 2014). At the local stage confined to the colon and the rectum, colon cancer has been reported in 40 percent of the cases. On the other hand, colon cancer that spreads to the surrounding tissues, found at the regional stage, has been reported in 36 percent of the cases diagnosed. Lastly, colon cancer that spreads to distant organs is documented to account for 20 percent of the cases (Zalis, Blake &Cai et al., 2012).On average, age has been affirmed to form a critical risk factor. For example, the average diagnosis age for colon cancer is 72. In 95 percent of deaths and 90 percent of new cases, the affected persons have been observed to be aged 50 years and above. However, the disease may affect women and men at any other age. Whereas screening services and increased awareness have led to a significant reduction in the rate of colon cancer among populations aged 50 and above, the rate of incidents in adults aged below 50 has continued to increase (Siegel et al., 2012). Also, ethnic background plays a crucial role in the spread of colon cancer. For instance, African-American women and men exhibit lower survival rates and higher risks of developing colon cancer. Specifically, this community reveals a 45-percent higher rate of mortality, while the incidence stands at 20 percent. Other communities that rate more favorably (compared to the African-Americans) include Native Americans, Hispanics, Asians, and Caucasians. According to Brearley et al. (2011), this disparity arises from disproportionate screening. Higher rates of colon cancer have also been reported among the Ashkenazi Jews (Jews of Eastern European descent) and the Alaskan Natives (Hershman, Lacchetti&Dworkinet al., 2014). Lastly, individuals with first-degree relatives (including parents, siblings, and children) with colon cancer pose a two to three-time risk developing the disease; compared to those who do not reveal similar family histories (Kushi, Doyle & McCullough et al. 49). Therefore, attributes such as ethnicity, race, and family history placeindividuals at a higher risk for colon cancer.

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