The Torch
Vol. 2 (2)

Microbiome and colon cancer

Rangon Dutta

Colon cancer, which is also known as colorectal cancer is the fourth most commonly diagnosed cancer and is considered to be the third deadliest one. Cancer still has no cure but its prevention might provide safety from cancer. According to recent studies, diet has an important impact on colon cancer development. Gut microbiota that contains trillions of microorganisms has been found to be helpful in maintaining good health and promoting antitumour response, specifically it can modulate susceptibility to colon cancer. Microbiota is formed during the time of birth and it increases the population of good microbes in our body to keep it secure from the foreign invaders or particles penetrating the skin. Our colon is enriched with useful microbes, including bacteria, archaea and fungi. With increasing age, the efficiency of these microbes reduces, making every individual prone to many diseases. With time, the population of microbes in our body changes and the composition too differs accordingly. The colon possesses microbes, such as Streptococcus gallolyticus, Clostridium clostridioforme, Bacteroides, Prevotella, Fusabacterium, which are equally divided and functional depending on the composition of the gut microbiome. Antibiotics that are being employed a lot in the present generation, cure the diseases but provide a great loss of good microbes thus leading to less population and less efficiency of gut microbiota. Colon cancer patients have been reported to have a high population of Bacteroides, Prevotella, Fusabacterium and limited or no population of microbes, such as Streptococcus gallolyticus, Clostridium clostridioforme, etc. Hence, modulating the pattern of the gut microbiome by following a good diet and reduced usage of antibiotics might help prevent the development and progression of colon cancer.

Keywords: Microbiome, Colon, Colon cancer, Diet, Antibiotics, Prevention, Gut microbiome, Microorganisms

Citation:
Rangon Dutta. Microbiome and colon cancer. The Torch. 2021. 2(2). Available from:
https://www.styvalley.com/pub/magazines/torch/read/microbiome-and-colon-cancer.