



"ORAL BACTERIA CAN MELT CANCER CELLS: A GROUND-BREAKING DISCOVERY AND EUREKA MOMENT"

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Dear Sir,

As we all know, cancer is a very widely spreading disease in today's world. It has affected a lot of people globally. Cancer has been one of the most devastating diseases in the recent world. It generally refers to the development of uncontrollable abnormal cells that divide uncontrollably and have the ability to infiltrate and destroy normal body tissues.¹ The epidemiological rate in 2022 was 20 million new cases and 9.7 million cancer-related deaths worldwide. The cancer rates were higher for the men than the women. (186.3 per 100,000), The survival rate for cancer nowadays is very nominal due to the advancement of the treatment. But recently, due to the advancement of medicinal research, we can hope to have more treatment options to treat cancer. Recently, researchers have found a bacterium that could be toxic for head and neck cancer cells and might give a better outcome for the patients.² New research suggests a common bacteria named Fusobacterium, which is generally found in the mouth, can melt cancer cells by releasing toxic molecules. It has been seen that Fusobacterium bacteria can do a miracle by destroying cancer cells.³ Fusobacterium organisms are anaerobic; they are also gram-negative bacilli and are similar to certain bacteriodes.⁴ They are visible as the spindle-shaped cells with sharp ends. Furthermore, they are responsible for melting certain cancer cells in the mouth. The relationship between the bacteria and cancer is more complicated than previously thought, as evidenced by the fact that fusobacterium can kill cancer cells in the head and neck and may also function as a biomarker to determine how a patient will respond to treatment. However, the findings are in the preliminary stage and require a lot of further research. But if the results are satisfactory, then a lot of people can be cured using these bacteria as an antidote for head and neck cancer treatment. This could be ground-breaking research in terms of the advancement of the cancer treatment. The discovery is very surprising, and more and more multidisciplinary research is needed to have a better understanding regarding the pathology of the bacteria for future cancer therapy.

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