

## **Dysbiosis of the Intestinal Microbiome in Colorectal Cancer Patients at Hospital of Amizour, Bejaia, Algeria**

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**Abstract :** Colorectal cancer is one of the most common types of cancer worldwide, and its incidence has been increasing in recent years. Data and fecal samples from colorectal cancer patients were collected at the Amizour Public Hospital's oncology department (Bejaia, Algeria). Microbiological and cohort study were conducted at the Biological Engineering of Cancers laboratory at the Faculty of Medicine of the University of Bejaia. All the data showed that patients aged between 50 and 70 years were the most affected by colorectal cancer, while the age categories of [30-40] and [40-50] were the least affected. Males were more likely to be at risk of contracting colorectal cancer than females. The most common types of colorectal cancer among the studied population were sigmoid cancer, rectal cancer, transverse colon cancer, and ascending colon cancer. The hereditary factor was found to be more dominant than other risk factors. Bacterial identification revealed the presence of certain pathogenic and opportunistic bacterial genera, such as *E. coli*, *K. pneumoniae*, *Shigella sp*, and *Streptococcus group D*. These results led us to conclude that dysbiosis of the intestinal microbiome is strongly present in colorectal cancer patients at the EPH of Amizour.

**Keywords :** microbiome, colorectal cancer, risk factors, bacterial identification

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