

24- Title: Primary tumor sidedness effect on survival in Egyptian patients with colorectal cancer.

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#### ABSTRACT

**Background:** Colorectal cancer (CRC) is the third most common cancer diagnosed worldwide. There is a significant difference between Right-sided colon cancers (RCC) and Left-sided colorectal cancers (LCC); a possible explanation for these differences is the different embryological origin of the proximal and distal parts of the colon and colorectum. From this point, many studies have investigated the impact of primary tumor location on patient outcome.

**Objective:** The aim of this study is to study the impact of primary tumor sidedness on prognosis in Egyptian patients with colorectal cancer. As, there is an embryological, anatomical, histological, genetic, and immunological differences between right-sided colon (RCC) and left-sided colon (LCC).

**Patients and Methods:** This prospective study included 60 patients who presented to Menoufia University, Department of Clinical Oncology and nuclear medicine between November 2015 and December 2017. This study included patients with pathologically proven colorectal cancer. Data were collected regarding clinicopathological characteristics, treatment modalities, and survival analysis including progression-free survival and overall survival.

**Results:** RCC exhibited a more advanced Nodal stage, increased tumor size, more frequently poorly differentiated tumors, and more positivity of lymph vascular invasion than LCC. There is overall survival benefit with Lt. Side of the colon; the mean overall survival is  $21.54m \pm 1.29 SD$  (95% Confidence Interval 19-24months) versus  $17 m \pm 2 SD$  (95% Confidence Interval 12-21months) but, statistically insignificant p value= 0.07.

**Conclusion:** According to these data, LCC showed better survival outcomes than RCC.so, some personalization of the treatment is needed according to the location of the tumor.

**Key words:** sidedness, Colorectal cancer, survival.