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HEREDITARY SYNDROMES ASSOCIATED WITH COLORECTAL CANCER

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Abstract: Cancer is a condition characterized by disordered and invasive cell growth in the tissues and organs of the human body. Hereditary intestinal cancer affects parts of the large intestine, such as the colon and rectum, and is influenced by hereditary genetic factors, benign lesions and polyps. Colorectal cancer (CRC) is the most common type, with a strong genetic predisposition related to several syndromes, such as familial adenomatous polyposis, Peutz-Jeghers syndrome, juvenile polyposis syndrome, Cowden syndrome, Lynch syndrome and Muir syndrome. -Tower. Familial adenomatous polyposis is marked by the formation of numerous polyps in the colon and rectum, increasing the risk of malignancy. Lynch Syndrome, related to mutations in DNA repair genes, increases the incidence not only of colorectal cancer, but also of other types, such as endometrium, ovary and stomach, standing out in the understanding and management of the genetic risk of CRC.
Keywords: Colorectal cancer; Syndromes; Polyposis.

INTRODUCTION

Cancer is defined as a set of diseases in which disordered and uncontrollable cell growth invades the tissues and organs of the human body. Therefore, hereditary intestinal cancer is a tumor that affects parts of the large intestine (colon and rectum) starting from hereditary genetic factors, benign lesions and polyps; Colorectal cancer (CRC) is the most common cancer with a strong genetic predisposition, including several syndromes such as familial adenomatous polyposis, Peutz-Jeghers syndrome, juvenile polyposis syndrome, Cowden syndrome, Lynch syndrome, and Muir syndrome. Tower.

GOAL

Identify which syndromes are most prevalent in colorectal cancer; Methodology: This work is an integrative review. The databases used in this research were the Scientific Electronic Library Online (SCIELO), Virtual Health Library (VHL); Hospital Israelita Albert Einstein and National Cancer Institute. The inclusion criteria were articles with text available in Portuguese, English and Spanish, published between the years 2019 and 2023. Duplicate articles were excluded during collection, thus, the sample of results totaled 5 articles;

RESULTS AND DISCUSSION

Therefore, most cases of CRC are attributed to sporadic causes or environmental factors. However, 10 to 30% are hereditary mutations, of which 5-6% relate to genes that show a strong predisposition for the occurrence of this neoplasia. CRC syndromes can be subdivided into non-polyposis and polyposis entities, the most common being Lynch syndrome and familial adenomatous polyposis. Familial adenomatous polyposis (FAP) is characterized by numerous adenomatous polyps in the large intestine and, if left untreated, leads to the development of malignant RCC. In Lynch syndrome (LS), affected individuals inherit a mutation in one of the alleles of these genes (germline mutation), and a somatic mutation leads to inactivation of the other allele, with a consequent accumulation of errors in DNA replication, an increase in the rate of mutations and acceleration of the carcinogenic process; Conclusion: Therefore, it is noteworthy that many syndromes can be observed with a strong genetic predisposition for the appearance of Colorectal Cancer, but familial adenomatous polyposis and Lynch Syndrome are the most common, with an almost 100% risk of developing the disease. CRC, depending on factors such as age, lifestyle and lack of timely treatments.

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