

41- Colorectal Carcinoma in Children and Adolescents : Leading LMIC Experience

Soha Ahmed MD1,2, Wael Zekry MD3,4, Ahmed El Hemaly MD 3,4, Asmaa Hamoda MD3,4 , Iman Zaky MD 4,6, , Alaa Younis 8 ,Hala Taha MD 1,10,11, Amr Elnashar 12

Department of Radiation Oncology, Children's Cancer Hospital Egypt (CCHE-57357), Cairo, Egypt, 2.Department of Clinical Oncology, Aswan University, Aswan, Egypt., Cairo, Egypt,3Department of Pediatric Oncology, Children's Cancer Hospital Egypt (CCHE-57357), Cairo, Egypt, 4 Department of Pediatric Oncology,National Cancer Institute, Cairo University, Cairo, Egypt 5Department of Clinical Research, Children's Cancer Hospital Egypt (CCHE-57357), Cairo, Egypt, Cairo, Egypt, 6Department of Radiology, Children's Cancer Hospital Egypt (CCHE-57357), Cairo, Egypt, 7Department of Radiology, National Cancer Institute, Cairo University, Cairo, Egypt, 8Department of Surgery, Children's Cancer Hospital Egypt (CCHE-57357 10Department of Pathology, Children's Cancer Hospital Egypt (CCHE-57357), Cairo, Egypt, Cairo, Egypt, 11Department of Pathology, National Cancer Institute, Cairo University, Cairo, Egypt,12Neuro-Oncology Study Team Clinical Research DepartmentChildren's Cancer Hospital,

Abstract

Background/Purpose: Colorectal carcinoma (CRC) is common in adults, but extremely rare in children with poor prognosis. Surgical management and long-term follow-up of this entity are still obscure because of lack of data. The study aimed to evaluate the clinical characteristics of childhood CRC and determining the predictors of poor outcome.

Patients and Methods: This study retrospectively included all CRC patients, below 18 years, treated in Children's Cancer Hospital of Egypt (CCHE, 57357 hospital)between 2007 and 2016.The Patients' information including age, sex, predisposing factors, positive family history, clinical characteristics, diagnostic procedures, disease extent, treatment methods, histological types, and survival outcome were collected from the files after patients' approval.

Results: There were 15 cases below 18 years with median age of 15 years. All patients had unfavorable CRC histopathology (mucinous adenocarcinoma) and 10 cases had metastatic disease at presentation. Initial surgical resection was complete in 8/15 cases, and all patients received adjuvant chemotherapy. Four patients were diagnosed with rectal adenocarcinoma and all were treated with upfront chemo-radiotherapy. Family history was positive in 3 cases; 2 cases had both predisposing syndrome (Adenomatous Familial polyposis) and Neurofibromatosis type 1 (NF1) and one case had NF1 syndrome only.Tenpatients had tumor progression or relapse, while 12 cases died at the end of the follow up period;overall survival (OS) and event free survival (EFS) was 17.8 % and 16.5 % respectively at 3 years.

Conclusions: Delayed diagnosis, advanced stages of disease, and, most importantly, mucinous type of histology are the major determinants of poor outcome in childhood colorectal carcinoma. Surgery remains the mainstay of treatment of pediatric CRC as in adults.Preoperative radiotherapy for rectal adenocarcinoma, offers better prognosis. Chemotherapy plays role in the metastatic disease and is able to down stage the primary tumor for better local control.

Key words :Children ,Colorectal Carcinoma