FAMILIAL COLORECTAL REGISTRY IN NORTHEAST OF IRAN

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ABSTRACT

Introduction: Colorectal cancer (CRC) is the fourth cause of mortality from cancer in Iran. The incidence (age-adjusted) rate of CRC in Iran has been reported as 6 to 7.9 per 100,000 persons. Twenty percent of total CRCs have a positive family history. Familial adenomatous polyposis (FAP) and hereditary non-polyposis colorectal cancer (HNPPCC) or Lynch syndrome (LS) are the commonest types. HNPPCC is more common with a frequency ranging from 1% to 6% in different populations. It includes 3-10 percent of CRCs in our country. The lifetime risk of CRC in individuals with (LS) is 50–80 %, so identifying patients and their family members enables at-risk relatives to be informed about their cancer risks and to benefit from implementation of specialized endoscopic screening programs that result in dramatic improvements in clinical outcomes for many of these families. The study aimed to register CRC records in Mashhad in the northeast of Iran, for exploring Iranian CRCs pattern.

Methods: A literature review was conducted to obtain all possible variables related to CRCs which were needed to explore CRC patterns. Then, final variables for gathering data were selected by Delphi technique. Patients with HNPPCC, FAP, and familial CRC were registered, and related data were gathered from January 2013 to February 2016. The Universal Strategy for IHC Screen of LS was applied.

Results: Of 322 CRCs, 33 were identified and registered as an HNPPCC, and 5 as a FAP. and an interesting finding was that a two-panel was as good as four-panel for detecting HNPPCC. Blood samples for germline testing and further genetic studies were saved in Data Biobank.

Conclusion: The study revealed familial CRC was prevalent in Iran, and appropriate screening of patients and their families will decrease the overall cancer incidence and improve the survival rate. We suggest policy makers design a comprehensive registry for CRCs which will help specialists to detect HNPPCC and FAP.

KEYWORDS: Colorectal Cancer, Registry, Lynch Syndrome, Mashhad