Book Review

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Review on: Diagnosis and Management of Hereditary Cancer - Tabular-Based Clinical and Genetic Aspects. By John W Henson, MD and Robert G Resta, MS. Academic Press, Elsevier, 2021.

With the discovery of BRCA genes, interest in hereditary cancer has mounted in all countries. However, most physicians and oncologists do not have enough knowledge of genetic concepts and their clinical applications. The physicians are also always short of time. This book produced in tabular form is most suitable for busy clinicians. The initial chapters provide information regarding concepts in hereditary cancer, genetic alteration in cancer, genetic counseling, and genetic testing. Detection of variants, and their interpretation as per the guidelines of the American College of Medical Genetics and Genomics (ACMG) is outlined. Topics such as oncogenes, autosomal recessive (AR) hereditary cancer syndromes, non-neoplastic conditions associated with AR cancer genes e.g., *ATM*, fumarate deficiency, Nijmegen breakage syndrome etc., and digenic modifiers of *NF1*, *TSC*, retinoblastoma, and *VHL* are covered. Factors which affect phenotypic variability such as molecular complexity, digenic effect, epimutations and environmental influences, haplo-insufficiency, mosaicism etc. are tabulated.

The section on red flags is very good and should be compulsory reading for all physicians. Issues that may affect evaluation of family history are covered. Pedigree symbols and definitions are enumerated. Features observed on physical examination and the disorders with which they are associated are listed in a useful table. Risk estimation models are explained briefly, although these are mostly based on European ancestry.

Screening, surveillance, and diagnostic tests for cancer [based on blood, urine, magnetic resonance imaging (MRI), ultrasound endoscopy, positron emission tomography (PET) scan etc.] are presented. Physiologic imaging tests for phaeochromocytoma, paraganglioma and neuroendocrine tumors are defined. Management of known alterations through chemoprevention, chemotherapy, colectomy, mastectomy, hysterectomy, gastrectomy, risk reduction oophorectomy etc. are detailed.

Section D covers tumor syndromes-related genes in some detail. Section E describes classic hereditary cancer syndromes starting from APC-associated polyposis, hereditary breast and ovarian cancer (HBOC) to renal cell carcinoma. Some patient care plans are presented, followed by information sources. Overall, the book fulfills the need of providing essential information on hereditary cancer for the busy clinician.