34- Retrospective Analysis of Clinical Epidemiology in Gastrointestinal Stromal Tumour

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ABSTRACT

Background: Gastrointestinal Stromal tumors (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract (GIT) i.e. sarcoma. GIST is

classified into mutation in KIT (cluster of differentiation 117,CD117) oncogene (85%), Platelet – drived growth factor receptor alpha gene (PDGFRA) (10%) or rarely B-Raf gene. C.Kit - which is mutated & activated in 80% of GIST- is an oncogene which encodes cell surface receptor Tyrosine Kinase TK (CD117) which is responsible for activation of multiple signaling cascades leading to cellular proliferation.
Aim of the Work: to explore the best management options of care for patients at Ain Shams University Hospitals (ASUH) by retrospectively analyzing epidemiological factors in Gastrointestinal stromal tumor patients and correlate them to clinical outcome; these factors are either patient or disease ones, while outcome include clinical benefits, survival and encountered toxicities.
Patients and Methods: this is a retrospective study. This study included 34 patients with GIST treated at the department of Clinical Oncology and Nuclear medicine, Ain Shams University between 2011 -2017 and followed up till 1-2017.
Results: many prognostic factors were selected for analysis to evaluate their impact on overall survival. Age, gender, site and size of tumor, mitotic index, histopathology, presence of metastasis at time of presentation and anemia all had no statistically significant impact on overall survival.
Conclusion: the prognosis of GIST is undoubtedly better than other sarcomas. No clear risk factor of GIST. Patient selection is paramount as to minimize the high cost of treatment. Tumor density must be known by Hounsfield unit before treatment to detect pseudo progression. Molecular analysis by PCR is very important to know sensitivity to treatment as a predictive biomarker. Patients should be kept on follow up for early detection of recurrence.

Keywords: *Epidemiology - Gastrointestinal Stromal Tumour - cluster of differentiation*