Understanding and Addressing the Challenges of Gastrointestinal Stromal Tumor (GIST): Towards Improved Diagnosis and Treatment Strategies

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ABSTRACT

Gastrointestinal stromal tumor (GIST) is a prevalent mesenchymal tumor affecting the digestive tract, with the stomach being the most common location. While some GIST cases are sporadic with no known risk factors, certain factors like age and genetic abnormalities increase the risk. Early diagnosis of GIST remains challenging due to atypical symptoms, leading to late diagnoses and reduced survival rates. This research aims to identify specific risk factors related to local populations, develop accurate early diagnosis methods, and formulate more effective treatment strategies. The study involves a retrospective observational approach, collecting data from medical records of GIST patients and analyzing risk factors and treatment outcomes. The results highlight the increasing prevalence of GIST globally, emphasizing the need for increased awareness and early diagnosis. Challenges in early diagnosis and treatment underscore the importance of public awareness, medical education, and collaborative efforts for better GIST management. This research offers implications for the development of diagnostic guidelines and more effective treatment approaches, ultimately improving the prognosis and quality of life for GIST patients.

INTRODUCTION

Gastrointestinal stromal tumor (GIST) is the most common mesenchymal tumor of the tract digestion. GIST can occur in various location in the channel digestion, with the stomach become most common location. Although part GIST is large in nature sporadic without factors known risks, some factors such as age and exists syndrome abnormality genetic can increase risk of GIST (Gheorghe et al.,...
The diagnosis of GIST is possible done through imaging And inspection endoscopy, and surgery is wrong One maintenance choice (Ahmed, 2020).

Gastrointestinal Stromal Tumor (GIST) is a rare tumor that occurs in the tract digestion humans, incl stomach and intestines. Globally, GIST has become health attention because its incidence is increasing. GIST patients often experience atypical symptoms, which makes an early diagnosis become difficult. GIST treatment is also becoming challenge because aggressive nature and resistant to treatment conventional.

In context specific, GIST has become increasing health problems important in the country this. There has been an increase the number of GIST cases diagnosed in recent years, and diagnosis often late, which results level low survival for patients.

Previous research has explored various diagnostic methods and GIST treatment. However, still there is the need to understand more factors risk specifically related to the population local and to develop strategy more effective treatment.

The uniqueness of this research lies in focusing on factors risk specifics that are relevant to a particular population, which can helps in early diagnosis and more appropriate treatment.

This research is critical to improving early diagnosis of GIST, improving knowledge medical And awareness public about the disease, as well as identifying strategies more effective treatment to improve level survival patient.

This research is to identify factors risk specific factors that contribute to the development of GISTs in certain populations, developing more accurate methods of early diagnosis, and formulate strategy more effective treatment.

Benefits of this research covers increase in early diagnosis of GIST, reduction morbidity and mortality, and enhancement quality life patient. In addition, this research can also provide guidance to practitioners medical treatment in GIST cases.

Results of this research can own significant implications in development diagnostic guidelines and more effective GIST treatment, as well as in improving understanding and awareness about this disease at the level local and global.

**RESEARCH METHODS**

Methods and Procedures this literature review is prepared using various sources of scientific journal articles related to the topics discussed. The keywords used in article search are "gastrointestinal stromal tumor", "Clinical manifestations", "Diagnosis", "Management", "Prevention". The article search procedure is carried out carefully and pays attention to its validity. The study will adopt a retrospective observational study design by collecting data from medical records of Gastrointestinal Stromal Tumor (GIST) patients from various hospitals. The target population is all GIST patients, with inclusion criteria that include a documented GIST diagnosis in the medical record. The data collected includes specific risk factors,
tumor characteristics, and treatment outcomes, which will be analyzed using statistical software to identify associations between risk factors and GIST outcomes. In addition, if needed, predictive models will be developed that will be validated using independent samples. Research ethics will be maintained by complying with the rules of patient privacy protection and ethical licensing. The results of the study will be presented in a scientific research report, and the research is expected to provide a better understanding of GIST, improve disease management, and advance medical knowledge.

RESULTS AND DISCUSSION

This research describe the findings found during research on Gastrointestinal Stromal Tumor (GIST) conducted on patients in various settings hospital within a certain period of time. The results of this study provide significant insights about the condition of GIST, as well implications in practice medical and further research.

Prevalence of GIST

This study, the prevalence of GIST was identified as an issue main. Found that GIST is increasingly often happens all over the world. Extensive data analysis show that GIST incidents continue increased in recent years. This is in accordance with the findings in the global background research, which states that GIST has become global health attention due to its incidence is increasing. This result confirm that GIST is a relevant problem and needs to be addressed further attention in context _ global health care.

Challenging Early Diagnosis

One _ findings main focus in this research is difficulties in early diagnosis of GIST. GIST patients frequently experience non-specific symptoms, such as pain stomach or digestive changes, which are often overlooked or mistaken interpreted. By therefore, patients often diagnosed in stages advanced disease, which reduces opportunity healing. This result emphasize urgency to improve understanding medical about early symptoms of GIST, as well education public about importance consult a doctor moment experience suspicious symptoms. _ early diagnosis is the key to improving the prognosis of GIST patients.

Challenges in GIST Treatment

GIST treatment is challenge big things that still need to be overcome. Found that GIST has aggressive nature _ and tend resistant to treatment conventional treatments such as chemotherapy. Results of this research justify statement in the specific background of the research that GIST treatment remains a significant health problems. Various treatment methods have been tried, including targeted therapy targeted at the mutation genetics associated with GIST. However, there isn't one yet complete treatment _ effective for all cases of GIST. Advanced research
necessary to identify strategies more effective treatment that can be overcome tumor resistance and increase level survival patient.

**Research Discussion**

1. **Importance Awareness Public And Education Medical**
   Results of this research confirm importance increase awareness public And education medical about GIST. Delay in diagnosis still become problem serious, and this can reduce opportunity healing. The public needs to be informed about symptom potential GIST and importance consult a doctor moment experience suspicious symptoms. Education medical care should also be improved to ensure that health professionals can recognize GIST better.

2. **Development Strategy More Effective Treatment**
   GIST treatment is challenging aspect in the management of this disease. Tumor resistance and variation GIST genetics make it an effective treatment become complicated. Findings this push the need for further research to develop strategy more effective treatment And personalized. Future research can focusing on development more sophisticated targeted therapies and better understanding of influencing factors _ response patient to treatment.

3. **Collaboration And Awareness Public**
   Results of this research emphasize importance collaboration between professional medical, research, and government in its efforts treating GIST holistically. Effort collaborative can produce diagnostic guide and better treatment. Apart from that, counseling and campaign awareness public must be increased to reduce diagnosis late And increase level survival GIST patients. Enhancement understanding and awareness about GIST at the level local and global will help overcome challenge main points revealed in this research.

4. **Research Implications**
   Results of this research own significant implications in development _ diagnostic guidelines and more effective GIST treatment. Apart from that, the results of this research can increase understanding medical And awareness public about this disease, which in turn can improve prognosis and level survival GIST patients. This research open avenues for possible further research help overcome the health issues they cause by GIST more effectively in the future.

**CONCLUSION**

Gastrointestinal stromal tumor (GIST) is the most common mesenchymal tumor of the tract digestion. Factor GIST risks include age beak middle aged to elderly And exists syndrome abnormality genetics such as Carney- Stratakis syndrome, Carney triad, Neurofibromatosis type 1 (NF1), and primary familial GIST syndrome. The diagnosis of GIST is possible done through imaging And inspection endoscopy, and surgery is wrong One maintenance choice. Other treatment methods for non- metastatic GISTs is technique endoscopy such as enucleation,
surgery submucosa, excavation submucosa, resection thickness, resection submucosa, and cooperative surgery endoscopy. GIST prognosis is affected by tumor size, mitotic rate, tumor location, presence of metastases, and success total removal of the tumor. Possible complications occurring in GIST include gastrointestinal bleeding and obstruction intestines.

REFERENCES


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