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Predictors of Postoperative Complications in Intestinal Fistulas

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Relevance: Postoperative complications remain a critical issue in the management of intestinal fistulas. Identifying predictors of adverse outcomes can help optimize treatment strategies and reduce patient morbidity. Early intervention and risk stratification are essential components of improving surgical success rates. The presence of comorbidities further complicates the treatment process, necessitating individualized management approaches. Factors such as nutritional deficiencies, immune response, and infection control play a crucial role in patient recovery. The development of predictive models can assist in making informed surgical decisions. Continuous monitoring and advancements in perioperative care contribute to better prognostic outcomes for these patients.

Objective: To evaluate the predictive factors influencing postoperative outcomes in patients with intestinal fistulas and to develop a risk assessment model for improved patient management.

Materials and Methods: A retrospective analysis was conducted on 272 patients treated for intestinal fistulas at the Tashkent Medical Academy from 2005 to 2019. Factors such as age, gender, comorbidities, time of admission, and previous surgeries were analyzed. Statistical methods, including the Student's t-test and Spearman correlation, were applied to identify significant predictors of postoperative complications.

Results: Patients with a history of two or more previous surgeries had a higher rate of postoperative complications. Delayed hospital admission (>24 hours) was associated with increased mortality and morbidity. Comorbid conditions such as cardiovascular diseases (9.9%) and liver disorders (8.8%) negatively affected recovery. Advanced imaging techniques improved early diagnosis and reduced the incidence of misdiagnosis. Patients receiving individualized perioperative care had significantly better recovery rates. The application of a predictive model allowed for early intervention and reduced complication rates. The study highlighted that optimizing nutritional and immune status preoperatively enhances surgical success.

Conclusions: Early identification of risk factors, timely intervention, and the application of advanced imaging and surgical techniques significantly reduce postoperative complications in patients with intestinal fistulas. Future studies should focus on refining predictive models and exploring novel therapeutic approaches.

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