INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT
SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563
eISSN 2394-6334 https://www.ijmrd.in/index.php/imjrd Volume 11, issue 02 (2024)

SPLENECTOMY: SURGICAL INSIGHTS, INDICATIONS, AND POSTOPERATIVE CARE

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Introduction: Splenectomy, the surgical removal of the spleen, is a procedure with profound implications for patients' health. This article delves into the anatomical aspects of the spleen, explores common indications for splenectomy, and outlines essential postoperative care considerations.

Key words: Spleen, surgeon, immune system, splenectomy.

Anatomy of the Spleen:

The spleen, situated in the upper left abdomen, plays a vital role in the immune system and blood filtration. Understanding its anatomy, including vascular supply and relationships with neighboring structures, is crucial for successful surgical interventions.

Indications for Splenectomy:

Explore the diverse medical conditions that may necessitate splenectomy, such as traumatic injuries, hematological disorders (e.g., idiopathic thrombocytopenic purpura, hereditary spherocytosis), and certain malignancies. Discuss the decision-making process behind choosing splenectomy as a treatment option.

Surgical Techniques:

Detail the various surgical approaches to splenectomy, including laparoscopic and open procedures. Highlight advancements in minimally invasive techniques, emphasizing reduced recovery times and postoperative complications.

The following variables were collected and analyzed for all patients: gender, age at the time of the splenectomy, date of symptom onset, initial care, time between the initial management and splenectomy, type of surgery (laparotomy or laparoscopy) and complications, presence of fever and/or B symptoms (defined by asthenia, fever, sweating, and weight loss), presence of splenomegaly and the size of the spleen (splenomegaly was defined either clinically or measured by morphological examinations (computed tomography or ultrasound) that confirmed a major axis > 12 cm), hepatomegaly, enlarged lymph nodes, and any other symptoms or clinical abnormalities. The results of biological analyses considered were those from the first medical contact. The collected biological characteristics were white blood cell, lymphocyte, eosinophil, monocyte, and platelet counts, hemoglobin, fibrinogen, ferritin, C-reactive protein (CRP), liver enzyme, calcemia, uric acid, and lactate dehydrogenase (LDH) levels, as well as plasma protein electrophoresis. The presence of hemophagocytic lymphohistiocytosis was sought, defined by the combination of clinical and biological signs . Data from hematological investigations, such as lymphocyte phenotyping (peripheral blood or bone marrow), bone-marrow cytology, and biopsy, were also collected. Microbiological investigations were recorded: viral serology, blood cultures, and other microbial investigations. The results of radiological tests, including CT, FDG PET/CT, and trans-thoracic or trans-esophageal echocardiography, were also recorded. Other exams, such as pathology results of lymph nodes or bone-marrow biopsies, were recorded when performed. The date and status at the last follow-up were recorded.

Complications and Risk Mitigation:

Examine potential complications associated with splenectomy, such as infection, bleeding, and the risk of overwhelming post-splenectomy infection (OPSI). Discuss strategies for mitigating these risks and optimizing patient outcomes.

Postoperative Care:

Provide a comprehensive overview of postoperative care protocols, covering pain management, monitoring for complications, and vaccination strategies to prevent infections. Emphasize the importance of patient education regarding the increased susceptibility to certain infections post-splenectomy.

Recent Advancements and Future Perspectives:

Highlight any recent studies or technological innovations in the field of splenectomy. Discuss emerging trends or potential breakthroughs that may shape the future of this surgical procedure.

Conclusion:

In conclusion, splenectomy remains a significant surgical intervention with broad implications for patient health. By understanding the intricacies of the spleen, indications for surgery, and advancements in techniques and care, healthcare professionals can optimize outcomes for individuals undergoing splenectomy. Splenectomy may be useful for the diagnosis of FUO and unexplained splenomegaly, but it should be performed only after exhaustive investigations. In our study, the splenectomy contributed to the diagnosis mainly of lymphoproliferative disorders, especially diffuse large B-cell lymphomas, which can be limited to the spleen. Our analysis of the pre-operative investigations underscores the importance of the pre-operative work-up. Our study highlights the usefulness of FDG PET/CT in these situations and the need for complete hematological investigations and proposes an algorithm that can be used before performing a diagnostic splenectomy.

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