Volume 7
Issue 2
December 2023
ISSN: 3027-5008 (Online)
ISSN: 3027-5016 (Print)

KOSOVA JOURNAL OF SURGERY

PAPERS PRESENTED AT THE THIRD CLINICAL CONGRESS OF THE KOSOVA COLLEGE OF SURGEONS, OCTOBER 12-15, 2023

KOLEGJI I KIRURGËVE TË KOSOVËS
KOSOVA COLLEGE OF SURGEONS
MMXVIII

www.kosovajournalofsurgery.net

Letter to the Editor

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Dear Professor Latifi!,

We read the case report by Hyseni et al. titled "*Large Splenic Cyst in a child"* withgreat interest and congratulate the authors on their publication. [1]

However, we would like to comment certain relevant details especially regarding the indication for surgery, the method used and the extend of the surgery. Surgical strategy in splenic surgery has changed substantially since the discovery of the immunological functions of the spleen.

The spleen has important immunological and hematological functions with high clinical relevance. It filtrates high volumes of blood via phagocytosis of senescent or damaged blood cells as well as microorganisms. Additionally, phagocyted antigens and pathogens are presented by antigen-presenting cells which activates T- and B- lymphocytes and – in consequence – leads to the production of opsonizing antibodies: a vital step in immune response. [2] In addition to its role in innate host defense, the spleen is also the greatest single secondary lymphoid organ. It's not surprising that splenectomy leads to a decrease in immunocompetence which may end in an overwhelming post splenectomy infection (OPSI). [3, 4] This syndrome is caused by a set of pathogens (Streptococcus pneumoniae, Neisseria meningitides, and Haemophilus influenzae) and represents one of the most feared sequelae of splenectomy with a fulminant sepsis and high mortality rates. [5] In a variety of disorders (e.g. Lymphoma types and stages, ITP etc) total splenectomy might be indicated due to therapeutic purposes. However, in many other indications (hamartomas, cysts including parasitic and non-parasitic cysts, as in this report) spleen preservation should be performed whenever possible. Even in some malignancies with single metastatic splenic lesion (i.e. malignant melanoma) organ preservation can be feasible.

Developments in equipment and refinements in surgical technique have made minimally invasive surgery as well robotic surgery feasible and safe on parenchymatous organs, including the spleen. The advantages of laparoscopic compared to open surgery include a reduced surgical stress response, lower blood loss, faster recovery, shorter length of hospital stay and important long-term complications such as incisional hernia (up to 20 % after elective surgeries [6]), and adhesions with consecutive bowel obstruction). [7–9] The feasibility of laparoscopic partial and total splenectomy, as well as possible technical approaches have been described by many, including our group. [10–13] and laparoscopy is accepted as the standard approach to the

spleen. However, extremely large spleens exceeding 24 cmin the long axis as measured by ultrasound should be considered for open surgery.

Several studies including ours have demonstrated that laparoscopic partial splenectomy is safe; We published a series of 67 patients undergoing laparoscopic partial splenectomy (the youngest being 13 years old) with no fatalities. [13] Two patients required conversion to open surgery and two required red blood cell transfusion.

In conclusion we advocate to favor a laparoscopically performed partial splenectomy whenever possible over total removal of the organ in this benign indication not only inchildren but also in adult and elderly population.

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