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Splenectomy Reports

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Abstract

Introduction

It was seen that splenectomy creates a disability situation in an individual, and in order to eliminate it, people applied to health boards to get a report to eliminate their social and economic losses recognized to them.

Objective

To examine the reason for surgery, method of surgery and the type of report they wanted to receive in splenectomised patients who applied to the general surgery committee polyclinic in 2017-2018-2019-2020 and 2023 when the pandemic ended.

Materials and Methods

Patients who applied to general surgery outpatient clinics were asked whether they had any surgery related to general surgery, and epicrises and pathology results of splenectomised patients were seen and recorded.

Results

Of the 23 splenectomised patients, 15 were female and 8 were male. Of the 15 female patients, 3 were splenectomised for ovarian ca, 3 for gastric ca, 2 for distal pancreatic ca, 2 for lymphoma, 1 for colon ca, 1 for traumatic cause, 2 for ITP, 1 for sarcoidosis. In male patients, 4 were splenectomised for traumatic, 1 for colon ca, 1 for ITP, 1 for thalassemia major and 1 for CML. The mean age of female patients was 48.1 years and the mean age of male patients was 37.4 years. The most common reason for splenectomy in women was malignancy and the most common reason for splenectomy in men was trauma.

Conclusion

Splenectomized patients had applied to receive the most DSR.

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Objective

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Materials and Methods

Patients who applied to general surgery outpatient clinics were asked whether they had any surgery related to general surgery, and epicrises and pathology

Table 1. Reasons for splenectomy in 15 female patients

	n	(%)
Stomach cancer	3	(%20)
Over cancer	3	(%20)
Distal pancreatic ca	2	(%13,3)
Colon cancer	1	(%6,6)
ITP	2	(%13,3)
Lymphoma	2	(%13,3)
Traumatic	1	(%6,6)
Sarcoidosis	1	(%6,6)

results of splenectomised patients were seen and recorded. Abdominal ultrasounds and abdominal tomographs of some patients with splenectomized cases were also recorded.Oncological documents of some patients who were splenectomized due to malignancy were examined

Results

Of the 23 splenectomised patients, 15 were female and 8 were male. Of the 15 female patients, 3 were splenectomised for ovarian ca, 3 for gastric ca, 2 for distal pancreatic ca, 1 for colon ca, 1 for traumatic cause, 2 for lymphoma, 2 for ITP, 1 for sarcoidosis. In 8 male patients, 4 were splenectomised for traumatic, 1 for colon ca, 1 for ITP, 1 for CML (chronic myelocytic leukaemia) and 1 for thalassaemia major. The mean age of female patients was 48.1 years and the mean age of male patients was 37:4 years. The most common reason for splenectomy in women was malignancy and the most common reason for splenectomy in men was trauma (TABLE 1).

Of the 8 male patients, 4 were traumatic, 1 had colon ca, 1 had ITP, 1 had CML (chronic myelocytic leukaemia) and 1 had splenectomy for thalassaemia major. (TABLE 2).

Table 2. Reasons for splenectomy in 7 male patients

	n	(%)
Traumatic	4	(%50)
Colon Ca	1	(%12,5)
ITP	1	(%12,5)
Thalassaemia Major	1	(%12,5)
CML	1	(%12,5)

Table 3. Report types of 15 female patients

	n	(%)
DSR (Disability Status Report)	11	(%73,3)
Disability Retirement	1	(% 6,7)
SCT (Special Consumption Tax)	2	(%13,3)
Appointing a guardian	1	(% 6,7)

Table 4. Types of reports received by a total of 8 male patients

	n	(%)
DSR (Disability Status Report)	6	(%75)
Exemption from military service	1	(%12,5)
Being a private security	1	(%12,5)

The mean age of female patients was 48.1 years and the mean age of male patients was 37.4 years.

Comorbidities

Hypertension in 2 patients, diabetes mellitus in 1 patient, hyperlipidemia in 1 patient, asthma in 1 patient, hepatitis B in 1 patient, osteoporosis in 1 patient, thyroid papillary ca in 1 patient.

Of the 15 female patients, 11 had applied for a disability status report, 2 for exemption from special consumption tax, 1 for disability retirement, and 1 for a guardian appointment report. (TABLE 3)

The types of reports received by the 8 male patients were as follows: 6 disability reports, 1 military exemption report, 1 private security officer report (TABLE 4).

Of the 23 patients with splenectomy, 22 patients had conventional splenectomy and 1 patient had laparoscopic splenectomy.(TABLE 5)

Table 5. Splenectomy methods

	n	(%)
Conventional splenectomy	22	(%95,6)
Laparoscopic splenectomy	1	(% 4,4)

Discussion

Objective and Introduction

Spleen is an organ with immunological functions. T and B lymphocytes in the spleen produce antibody response against antigen and thus create immune response. Macrophages in the spleen remove pathological erythrocytes, leukocytes, platelets, especially encapsulated pneumococci from the circulation, the spleen stores erythrocytes, reticulocytes, platelets, lymphocytes ready for circulation, contains 11% of the normal volume of plasma, and is the storage place for re-use of haemoglobin iron (1). When antigen is encountered in the spleen, ig M, ig G opsonised antibody response is generated from the white pulp, tuftsin and properdini and encapsulated bacteria that are not sufficiently opsonised phagocytose pneumococci and h.influenza, but when the spleen is removed, this phagocytosis does not occur and the risk of postplenectomy sepsis arises(2). Splenectomy is one of the causes of essential thrombocytosis and may lead to myelofibrosis and myelosuppression may be required; therefore, low dose aspirin treatment is recommended to prevent microvascular thrombosis in essential thrombocytosis. Patients applied for a health board report due to deficiencies and complications related to the loss of function after the loss of such an important organ, ongoing haematological disease; ITP, beta thalassaemia, or cancer-related problems, and socioeconomic loss. Splenectomy was performed for haematological disease, adjacent organ malignancies, metastatic splenic tumour, traumatic reason in this study. ITP is a disease with a rate of 5-10 per 100.000 and is frequently observed in women aged 15-50 years (4). Splenectomy is an intervention that provides remission in patients with Immune (idiopathic) Thrombocytopenic Purpura who do not improve with medical treatment. ITP is an entity characterised by shortening of platelet lifespan due to immunoglobulin G-type antiplatelet factors, thus decrease in the amount of platelets and proliferation of megakaryocytes in the bone marrow. Thrombocytopenia improves to normal levels in 70-80% with splenectomy (5).

Thalassemia originates from a single gene defect, is a hereditary haemoglobin production anomaly and is mostly autosomal recessive (2,6). In thalassemia, hypochromic microcytic anaemia is present and it is aimed to increase the haemoglobin level above 9ml/dl with erythrocyte transfusions (2). Splenectomy is performed in the presence of splenomegaly and splenic infarction and does not correct the genetic defect but reduces the need for blood transfusion (2). Autologous genetic therapies are being studied in thalassemias (7).

In a study in which 204 splenectomy cases were analysed, cases performed for haematological reasons ranked first with 58 cases and 38 splenectomies due to traumatic reasons ranked second, and the increase in conservative approaches after posttraumatic splenic injury was effective in this (8).

In another study including 184 splenectomy cases, it was observed that 54 cases were performed for haematological reasons and 70.4% of these 54 splenectomies were

ITP cases (9). The most common reason for splenectomy in chronic myeloid leukemia was splenomegaly and platelet deficiency(10,11).

Post-splenectomy sepsis cases, which are seen at a rate of 0.1-0.5% after splenectomy and generally less than 1%, reveal the importance of the function of the organ . In the USA, 25000 splenectomies are performed annually due to trauma, haematological reasons and cancer, pneumococcal, meningococcal and influenza vaccines are administered to asplenic individuals to protect them from postplenectomy sepsis, and the rate of OPSI (overhelming postsplenectomy infection) is 3-5% (12). By preserving 25% of the splenic parenchyma with laparoscopic partial splenectomy, the spleen can fulfil its immune function and the risk of thromboembolism can be reduced (13,14).

Table 6. Scoring of splenectomised cases

	(%)
Splenectomy only	10
Splenectomy and gastric ca	10% + 25%
Splenectomy and colon ca	10% + 25%
Splenectomy and pancreatic ca	10% + 25%

In this study, it was observed that in female patients who applied for a disability report after the loss of an important haematopoietic organ, patients who underwent splenectomy due to general surgery and gynaecological malignancies were in the first place, and splenectomies due to ITP were in the second place. Traumatic splenectomies ranked first and haematological splenectomies ranked second in the applications made by male patients to obtain a disability report due to splenectomy. It was observed that female patients were more common in applications according to gender.

In this study in which splenectomised cases were examined, patient epicrises were found to be sufficient as a document, and only one patient who applied for a medical board report with the request to be exempt from military service was decided to be exempt from military service in accordance with article 45/B-13 of the military service regulation in the committee with the receipt of a radiology report with splenectomised case evaluation (15).

Splenectomised patients who applied to the medical board were evaluated in terms of functional deficiencies caused by organ loss, and all patients were given 10 points as a percentage score for disability only because of absence of spleen, and additional points were added for accompanying malignancies related to general surgery (Table 6).

Conclusion

It was observed that the highest number of applications for obtaining a report was made for the report declaring the status of disability, which includes the rights to benefit from tax deductions, to receive a disability salary, and to obtain a disabled identity card.

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