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SURGICAL TREATMENT OF MALIGNANT MELANOMA

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Abstract

Introduction: Malignant melanoma is one of the smallest diseases known since the time of Hippocrates, whose incidence in the last decade is the highest. Although with a vague pathophysiology of occurrence, most studies show that in its occurrence the influence has external and internal factors. The diagnosis of this disease is done by diagnosis of the primary tumor, and the search for regional and distant metastases at the time of diagnosis of it. Melanoma therapy is still primarily surgical as a method of choice. Radical lymphadenectomy is used in metastatic melanoma in regional lymph nodes combined previously with or without biopsy of the first gland guard in the regional lymph pool.
Objective: The objective of this study is to show the surgical treatment of malignant melanoma at the Clinic for Plastic and Reconstructive Surgery in Skopje in the last two years. Also, the secondary goals are to display treatment for locally localized malignant melanoma in the regional lymph nodes.
Material and Methods: This is one retrospective study of treated patients from malignant melanoma at the Clinic for Plastic and Reconstructive Surgery in the period from January 2015 to August 2017, during which a total of 235 patients were analyzed. Two groups of patients with primary melanoma without signs of regional metastases (135) and melanoma with clinically present substrate in the regional lymph nodes were analyzed (100). In 40 patients, a previous biopsy of the first lymph gland was performed.
Results: The applied methods in the performed surgical treatment in all patients were adequate and successfully performed. There have been no serious complications in post-operative monitoring of patients. In the 40 patients based on the thickness of the primary malignant melanoma after the pathohistological analysis, the first lymph gland biopsy was performed to determine the further course of treatment.
Conclusion: This study confirmed that the surgical treatment of malignant melanoma is a golden method of choice for the treatment of this malignant disease. The study also emphasized the significance of the biopsy of the first liver gland guard, in the early identification of the presence of (micro) metastases in regional lymph nodes and the need for radical regional lymphadenectomy.

Keywords: Malignant melanoma, surgery, operative treatment, lymphadenectomy, metastases.

Introduction

The term cancer is used to define an abnormal increase in skin levels, which may be of a benign or malignant nature. We classify the skin tumors according to the classification in two types: Tumors that affect the skin and that their primary origin has their superficial layers.
Usually skin cancers develop in the epidermis, which is the outer layer of the skin and the tumor is clearly seen. This causes the disease to be caught in the early stages of it.
It is a pathology that develops slowly, patients present: - Changes in symmetry, borders, color and diameter, and the appearance of these lesions can also cause the patient pain, itching, occasional bleeding and the formation of the croissants.
Changes in the symmetry of menses, in benign cases the lesions are mostly in harmony and symmetry, in malignant cases are asymmetric. Benign lesions have regular limits on the skin, maligns are irregular, occasional and risen on the skin.
Malignant tumors may be from dark brown to black, tumors are more open in color. Melanomas reach a diameter over 6mm, below this diameter the tumor can be benign.
To determine the tumor stage, the TNM system is used, where T (tumor spread), N (invasion of lymph nodes, M (metastases present).
T0: No tumor presence

T1: Tumor is not more than 1mm
T2: Tumor is between 1 and 2mm
T3: Tumor is between 2 and 4mm
T4: Tumor is larger than 4mm
Tx: Cancer coverage cannot be judged
N0: No invaded lymph nodes
N1: A lymph node has invaded
N2: 2-3 lymph nodes have been invaded
N3: Four or more lymph nodes have been invaded
Nx: Invasion of lymph nodes cannot be judged
M0: There is no presence of metastases
M1: There are metastases in other organs such as pulmonary and colon
Mx: The presence of metastases cannot be judged

Skin cancer diagnosis methods

• The first step is to take the patient's history, as it has been the first sign displayed on the skin, its color, its size or appearance, whether there were signs such as pain, itching, bleeding?
• Family history records for previous cancers.
• Dermatoscopy, through it, determines the onset of cancer, as well as the lesson on its characteristics.
• Biopsy is a standard procedure where a material is taken and sent to the laboratory for microscopic examination. The biopsy may be intial and exquisite, with local anesthetic.
-Inccial biopsy removes only a part of the tumor and studies the cells.
- Exocytic biopsy removes all the mass, it also has a therapeutic effect.
• Computerized tomography uses X-ray to give detailed body images, and helps visualize metastases
• Magnetic Resonance is a good diagnostic method
• PET scan shows whether cancer has spread to the lymph nodes or other parts of the body. This is accomplished through the injecting of radioactive sugar, cancer cells consume more glucose compared to normal ones and thus can be visualized.
• Blood tests, the test for LDH (lactate dehydrogenase), which is high indicates that the disease may have metastasis and treatment is difficult.
• Chemical tests are performed to see the hepar, renin and bone marrow function.

During the preoperative time

The preoperative period is very important to evaluate the physical and psychological status of the patient.
1. Complete history and physical examination of the patient regarding the presence of pain, hydroelectrolyte balance, nutriotic status, presence of infections, cardiovascular, pulmonary, renal, gastrointestinal, neurological, endocrine, immunological function. Information on the patient's medical history is taken. Significance is given to the habits of health, previous operations, chronic illnesses and its social history (civil status, whether secured or not).
2. A detailed assessment of the general physical and psychological condition of the patient is carried out in order to prevent postoperative complications. Prior to surgery, the patient should be in good physical condition, understand the nature of the operation and what is expected in the postoperative period.
3. Preoperative analysis, necessary examinations such as: ECG, radiography, laboratory analysis.
4. The consensus for surgical intervention is indicated.

Treatment of Melanoma

Local and regional, systematic therapies

Local, regional and systemic therapies are used to treat melanoma.
Local therapy treats primary tumors in the skin. Surgery is a way of local treatment. Regional therapy involves the removal of lymph nodes. Systemic therapy is achieved through interferons.

Surgical treatment: (Types of surgery)

1. Extensive local excision is performed if you are diagnosed with melanoma after the biopsy. In many cases more skin should be removed around melanoma. In this type of surgical intervention a piece of skin and tissue around the melanoma is removed, the muscle is not touched. The amount of tissue that is removed depends on the depth.
2. Skin Graft. Some patients require replacement of the skin over the exterior. This piece of skin is called the graft. The part from where the graft is picked is called "donor area".

Postoperative complications

- Hemorrhage is a complication, which may appear as a result of blood vessel loosening or suture release. Applying pressure on the site of bleeding and promptly prompted.
- Edema may be present, often forming pus, which increases the chance of infections. If the body temperature reaches 38°C, it is not to worry because it is due to the withdrawal of the blood into the lymph from the operator's wound, if the temperature reaches 39°C or more, then it is a wound infection or an infection in general. Infection can be caused by skin and mucus damage by contact with the catheter or the drainage tubes. Lack of aseptic techniques when changing the wound can increase the chance of infections.
- Often after surgery, patients due to extended stay for a relatively long time have a decrease in the tone of the urinary bladder. We put catheterization to the patient.
- Another complication occurring is the lack of intestinal peristalsis. If it does not start after 48 hours after surgery, the nasogastric probe will be placed on the gastric aspiration.
- Nausea and vomiting are post-operative phenomena that occur as a result of anesthetic agents. It can also be caused by the accumulation of gastric before peristalsis starts, from abdominal distension and from psychological factors. When the vomit is numerous, the patient may lose many fluids and electrolytes, which can lead to dehydration and electrolyte and fluid disorder. If vomiting is multiple then the patient is treated with I / V and 25mg chlorpromazine or primperan. Giving food begins after the intestinal perstralia has begun.

The aim of this study

This is a work presenting a melanoma presentation, and this work includes theoretical data on cases of melanoma, incidence and prevalence of this disease in the Republic of Macedonia.

Material and methods of work

This study was done at the Plastic Surgery Clinic in Skopje, for the last two years from January 2015 to August 2017, with a total of 158 patients with Melanoma Malignum, 40 of them biopsy. 105 of them were metastatic, 53 metastasized.

Results

From clinical practice the diagnosis of melanoma cases include

1. Changes in skin integrity associated with melanoma in the face.
2. Risk of infections related to the surgical wound.
3. Acute pain as a result of the exterior.
4. Anxiety and fear associated with cancer diagnosis.
5. Knowledge Deficit related to self-care activity.

In the amount of cases surgical treatment, after timely diagnosis, is the only effective route that provides treatment for affected patients, the expectations from surgical treatment include

1. Have a full recovery of the wound without the presence of the infection.
2. Have no pain.
3. Eliminate anxiety and fear of diagnosis.
4. The patient has all the information about home care procedures.

From the data at the Plastic Surgery Clinic in Skopje, for the last two years from January 2015 to August 2017, with a total of 158 patients with Melanoma Malignum, 40 of them were biopsy. 105 of them were metastatic, 53 metastasized. This shows an increase in the incidence of melanoma cases, even in all human age groups.

Conclusion

From this study we conclude that in recent years the number of patients with MM has increased by 10% and their final treatment is surgical.

The incidence and prevalence of melanoma shows a growing train in many different parts of the world, the factors leading to the occurrence of these disorders are not yet pronounced. The treatment of timely diagnosed patients includes surgical treatment which in more than 90% of cases is successful.

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