

## 16. COMBINED SURGICAL TREATMENTS IN CUTANEOUS MALIGNANT MELANOMA

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**Introduction**. Malignant melanoma is a form of malignant cancer of the melanocytic system that is most commonly located in the skin, they are one of the most aggressive and unpredictable developments of all forms of skin cancer. MMC is a current problem in clinical oncology, due to its biological characteristics, aggressive evolution and early metastases. MMC represents 95% of all melanomas, causing the worst prognostic problems, with a diverse location (in the eyes, ears, gastrointestinal tract, oral mucosa, genitals). MMC is not the most common type of cancer, but its incidence is growing faster than any other type of cancer. MMC is found worldwide with a frequency of 1% of all human malignancies, producing 0.75% of malignancies.

**Aim of study.** The aim of the study was the comparative analysis of surgical methods for the treatment of patients diagnosed with Cutaneous Malignant Melanoma in the Department of Skin Tumours, Melanoma and the Locomotor System, for the correct approach and optimization of the surgical treatment of patients with this disease.

**Methods and materials.** This study was performed at the IMSP Oncological Institute of the Republic of Moldova. The research was descriptive-transversal and was conducted during the years 2003-2020 and the patients included in the study were diagnosed with Malignant Cutaneous Melanoma.

Results. We studied 60 cases of patients diagnosed with various clinical forms of Cutaneous Malignant Melanoma and who were treated surgically by various methods. According to the analysed studies, the treatment methods performed according to the traditional surgical method, the vacuum excision method and the cryodestruction method with tumour excision in malignant melanoma, we established that the excision margin of the performed methods plays an important role in recurrences. The excision margin of the tumour, according to the 3 studied methods, will be achieved after the Clark invasion level. Thus we established that according to the classical surgical method in the level of invasion Clark I will be 1 cm from the edge of the tumour, in level II Clark-2 cm, in level III Clark 3 cm, in level IV Clark 3.5 cm, and level V Clark 5 cm from the edge of the tumour. At the same time, the shape of the ulcerated or nonulcerated tumour and the location of the tumour will be taken into account. If the postoperative defect is severe, treatment will be combined with autodermoplasty. In the case of the method of cryodestruction of the tumour and subsequent excision, it will be performed for MMC with Clark I and II - 1.5 cm, Clark III and IV - 2 cm, Clark V - 3 cm. For the vacuum excision method that was applied only to ulcerated forms, the edge of the excision was at Clark I-1.8 cm, Clark II-2 cm, Clark III-2.5 cm, Clark IV-3 cm, Clark V - 4 cm (figure 2). It was found that recurrences after classic surgical treatment were often developed for MMC in stage IV and V with an index of 3.5% and 3.6%. Level III MMC invasion after Clark relapses accounted for 1.6% of cases. No levels of recurrence were detected for levels I and II after Clark. Another analysis, according to various studies, on determining the time of wound regeneration found that according to the classic surgical method wound regeneration occurs between 10-14 days, which is the fastest and in the case of cryodestruction of tumour with tumour excision wound regeneration is 20 -30 days, which is the slowest regeneration time. In the case of vacuum-excision of the tumour, regeneration lasted between 16-18 days postoperative.

Conclusion. The surgical treatment method combined with MMC cryodestruction is effective compared to the classic method by the additional effect of destroying the tumour, it can be done in 2 steps, and the result of the method is to reduce the number of recurrences by 2% -4% compared to the classic method. The method can be applied in various clinical forms of MMC, but with a better result for non-ulcerated forms. % cases of recurrence for level I and II of Clark invasion, achieved in a time, with regeneration of 18-20 days, can be performed in any ulcerated form of MMC, requiring expenses for the application of devices of different sizes. The comparative study of the surgical treatment methods performed between various studies determined that they can be applied in any clinical form of MMC, including the ulcerated one, compared to the vacuum-excision method which is indicated and performed only in the ulcerated form of MMC. According to the excision margin of the tumour and recurrences, it will increase with the size of the tumour, the ulcerated shape and the Clark level of invasion, and studies show that the excision margin and recurrences are lower in combined treatment methods compared to conventional surgery. The fastest regeneration of the wound was determined by the classic surgical method of 10-14 days compared to the combined surgical methods of 16-30 days. Combined surgical methods are more effective but require longer treatment time and costs.