

1884, Boeck described use of the mucous membrane in exchange for conjunctiva. In 1870, Gradenigo described use of eyelid tissue to compensate the imperfection of the eyelid. Landult used full-thickness tarsus-conjunctival flap for reconstruction of eyelid. In 1919, to compensate the defect of the superior eyelid, Esser used full-thickness rotationem flap from the

## MATERIAL AND METHODS

In the period from 1999 to 2003, 50 unselected patients with 54 malignant or suspicious malignant lesion on the eyelids and periorbital area were operated on at the Clinic of Plastic and Reconstructive surgery in Skopje. Out of these, there were relapses after their

Tumor's excision and trauma are two most frequent causes that include imperfections on the eyelids and periorbital skin, which consequently lead to surgical correction (Mystarde 1981). In this area, the most frequent cancer (90%) is BCC (Bostwich, 1975). PCC, malignant melanoma and cancer of the skin adnexis can also be found in this area. To repair the defect, the surgeon can use many different surgical techniques. Proir the operation, several issues should be analyzed so that the surgical plan goes smoothly. These include analyzing the dimension and orientation of the imperfection, age, vascularizations of the surrounding tissue, biological state, previous treatment, wound status and some other elements, such as previous radiation. Malignant cancer of the eyelid and periorbital area makes cosmetical defects and it also ruins deeper structure. The final aim of all surgical methods that can be used, to eradicate the cancer "in toto" without any damage of the structure and function of the eye as well as to achieve normal function and cosmetical result.

inferior eyelid.

### Anatomy

Surgical anatomy of the superior and inferior eyelids is described in five layers:

1. Skin and subcutis
2. Protractors of the eye lids
3. Orbital septum
4. Retractors of the eye lids
5. Tarsus and conjunctiva

### AIM OF THE STUDY

The aim of this stusy was to analyze the clinical characteristics and results from reconstruction after excision of 35 malignant cancers, which were treated on the Clinic for Plastic and Reconstructive Surgery, Skopje. The accent was also placed on testing the surgical techniques, their safety and efficiency.

primary treatment in other hospitals (1 with radioterapy and 2 with surgical tretmant). All excised lesions were histopathologically examined for confirmation of the diagnosis and radicalism of the excision. Patients with inadequate excision were operated on again and histopathological analysis was made again. Out of 54 lesions that were surgically treated, 36 were malignant (32 BCC, 3 PCC, 1 mel. malignum). As the frequency of other cancers was very low, detailed analysis was made only for BCC. The presence of BCC according to sex was: 20 males and 16 females. The youngest patient was 33, and the oldest was 84 years. Distribution by age is given in Table 1. The smallest excision was 8x10 mm. The biggest was 18x52 mm. Most of the patients came for regular control. Maximal control lenght was 4 years, minimal 3 months. Low rate of post operative problems shows good functions. Topographic distribution of the cancer is presented in Table 2. The most frequent localization was on the inferior eyelid. In 10 cases, the margins of the eyelids was involved. For statistical reasons lesions that were localized medially from punctum lacrimalis, were reported as lesions on the medial canthus. Simillar to this, every lesion that was localized on the inferior or superior eyelid spreading to lateral canthus was reported as lesion on the lateral canthus.

**TABLE 1**

**Patient's Age**

| Age      | Number of patients |
|----------|--------------------|
| under 35 | 1                  |
| 36 - 45  | 2                  |
| 46 - 55  | 8                  |
| 56 - 65  | 13                 |
| 66 - 75  | 10                 |
| over 76  | 2                  |
| Total:   | 36                 |

### Anesthesia and general treatment

Two patients were operated on under total anesthesia. The remaining 34 were operated on with local