FACE SKIN NEOPLASMS – REASONS FOR DELAYED TREATMENT

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The most common skin neoplasms are carcinoma: basocellulare, spinocellulare, planoepitheliale and melanoma malignum. Early surgical treatment is crucial for recovery as well as for good aesthetic result, especially on exposed body parts. All those lesions are visible for observers and the time from their appearance to surgical treatment seems to be too long.

**The aim of the study** was to answer the following questions: 1. After what time from the skin lesion appearance the patients report to a surgeon? 2. What is the underlying cause of delayed reporting for treatment of patients with skin lesions?

**Material and methods.** Questionnaire studies and analysis of medical histories were performed in the group of patients referred to Plastic Surgery Out-Patient Clinic in Łódź because of facial skin tumor in the last 5 years. Finally we collected data for 123 patients.

**Results.** The analyzed group consisted mostly of men (n=72). The age of respondents ranged from 45 to 92 years, mean 69.9 years ± 10.8 years. Mean time from observing lesion to the first medical consultation was 7.3 months and to visiting our Out-Patient Clinic was 2.7 years (ranged from 3 months to 16 years). All patients were qualified to surgical excision of tumor. Histopathological verification confirmed diagnosis of malignant neoplasms in 116 patients. In question concerning causes of delay in medical consultation or treatment, all respondents answered that fear of surgical procedure was one of the reasons.

**Conclusions.** Fear of surgical treatment is the most common cause of delay in patients’ visiting doctor. In our society conviction of neoplasm spreading after surgical excision is common, especially among elderly.

**Key words:** face skin neoplasms, delayed treatment.

The most common malignant neoplasms of the skin include the following cancers: basal-cell carcinoma, squamous cell carcinoma, planoepithelial carcinoma or malignant melanoma (1, 2, 3). The first one develops slowly and usually does not produce metastases (2, 3). The other ones develop rapidly, producing metastases to the neighbouring lymph nodes, and in the case of malignant melanoma also to the brain, bones or kidneys (4-7).

The problem of increasing incidence of the above diseases is paradoxically associate with the developments in medicine which protecting the health extends the human lifespan. It is exactly in the process of advanced aging that numerous pathological lesions appear on the skin. The pathological lesions on the skin in the elderly may be associated with the prolonged exposure to the sunlight (8). The other risk factors include the irritation and injuries of birthmarks (9). In addition, this picture falsifies the desire, as understood by the society, to achieve the longest-lasting attractiveness. This is undoubtedly associated with the growing fashion for exposure to UV rays from the early adulthood. It is exactly the UV radiation (sun and artificial) that may be responsible for the development of skin neoplasms (1, 2, 3, 10, 11). In photo-injured skin there occurs an elevation of levels of metalloproteinases which degrade and disorganise the collagen fibres. The pathomechanism of carcinogenic activity is as-
sociated with, among other things, the damage to nucleonic acids as well as the weakening of local immune response (10, 12).

Early surgical treatment is the basis of curability, as well as the achievement of good aesthetic result, particularly in the exposed body parts. Despite the development of lesions visible for all the observers (patients, friends, physicians) the time from the lesion appearance to the initiation of surgical treatment seems too long.

The study was aimed at answering the following questions:
1. After what time from the skin lesion appearance the patients report to a surgeon?
2. What is the underlying cause of delayed reporting for treatment of patients with skin lesions?

MATERIAL AND METHODS

For the study aim execution a survey was conducted and an analysis of medical documentation was performed for patients who within the previous 5 years (January 2006-October 2010) reported to the Plastic Surgery Clinic in Łódź due to tumours localised on the face. The study enrolled patients qualified for surgical treatment in which the clinical diagnosis of malignant neoplasm was posed. The verification of clinical diagnosis was the result of histopathological examination.

Bearing in mind the aim of the study, a questionnaire was created containing questions about when the lesion appeared, what was the time from its appearance to the reporting to a physician, what was the specialisation of the physician the patient with a skin lesion reported to, what was the time between the receipt of referral from a family doctor the patient reported to the Plastic Surgery Clinic, whether prior to the surgical procedure the patient was treated by other methods and which ones from among the listed ones: local preparations, cryotherapy or laser therapy, and whether prior to undergoing surgery at this Clinic the patient had been previously qualified for surgery to which he/she had not reported.

In addition, the questionnaire contained a question whether a factor delaying the reporting for consultation and/or surgical treatment was the fear of surgery and the conviction that this type of lesion should not be resected as it leads to a more rapid dissemination of neoplasm (possible answers: definitely yes, rather yes, I cannot say, rather no, definitely no).

Moreover, the respondents were asked to indicate the reasons for the delay in the reporting for the surgery (choice between one of the following answers: fear of surgery, I don’t see the need for such a treatment, persons immediately close to me advised against the procedure, other treatment was applied, or it was asked to list other reasons). The patients completed the questionnaire during the check-up visit at the Clinic, and in the case of patients not reporting for the visit at the appointed time, the questionnaire was sent by mail. Ultimately, complete data were collected for 123 patients. Demographic data (i.e. age and place of residence) and those relating to the course of treatment were obtained from the clinical medical documentation.

RESULTS

In the analysed group, males predominated (n = 72). The age of studied individuals was 45 to 92, mean 69.9 ± 10.8. The patients resided more often in a village (n = 56), while the remaining ones from towns: small ones (< 20 thousand inhabitants) (n = 14), medium ones (20-100 thousand inhabitants) (n = 27) and large ones (above 100 thousand inhabitants) (n = 26). In all of them the skin lesion was characterised by clinical features of malignant neoplasm: diameter of above 0.7 cm, irregular edges, heterogeneous colouring and/or the presence of non-healing ulceration limited by raised, folding edges (fig. 1a). The mean time...
Face skin neoplasms – reasons for delayed treatment of reporting to the physician for the first time, as stated by the patients, was 7.3 months. The majority of those studied (n = 99) stated that after the initial consultation they were referred for surgery, while 24 patients had been offered other treatment methods (local treatment with the use of ointments – 6 patients, cryotherapy – 17 patients). When asked whether the patients had been previously referred for surgery, to which he/she did not report, before reporting to the Plastic Surgery Clinic, 17 patients provided a confirmatory answer.

The time from lesion occurrence to the reporting for consultation in the Clinic was between 3 months and 16 years, mean 2.7 years (tab. 1). A small number of patients (n = 28) reported in the first year from first observing the lesion, the majority – in the period between 1 and 5 years (n = 74) and from 5 to 10 years (n = 14), while several patients only after 10 years (n = 7) (fig. 1a). All the patients had been qualified for surgical lesion resection and covering the loss with the use of local plaque (n = 72), or free skin grafts of full or median thickness (n = 37), while in 14 patients it was necessary to use distant pedicle flaps (fig. 1a, 1b, 1c). In 5 patients with extensive facial neoplasms, the procedures were performed with the participation of specialists in oral and maxillofacial surgery. These involved, among other things, the resection of the ramus of the mandible or eye enucleation. The covering of so extensive losses required multi-stage treatment associated with the need for moving the flaps and transferring their pedicles to the supplementing site. The histopathological verification in 116 patients confirmed the clinical diagnosis of malignant neoplasm (97 – basal cell carcinoma, 14 – plane epithelial carcinoma, 4 – squamous cell carcinoma, 1 – melanoma), and in 7 patients the lesion proved benign (5 – papilloma plane epithelial hyperkeratoticum, 2 – melanocytic nevus) (tab. 2).

The question of whether the fear of surgery delayed the reporting for consultation with a specialist all the patients answered definitely yes or rather yes.

As many as 67 patients in reply to the question of whether they believe that the resection of a lesion suspected of neoplastic nature fastens the disease dissemination answered definitely yes or rather yes, while 45 patients could not say. The others (n = 11) did not agree with this statement. In the question concerning the most important cause of delayed treatment initiation, the majority of the studied individual (n = 85) confirmed that of decisive significance was fear of surgical treatment, while 24 patients had been offered alternative treatment methods. Among the respondents, 8 patients indicated that they had not seen this treatment as necessary, while for 6 patients surgery had been advised against by immediately close persons.

Table 1. Time from the lesion appearance to reporting for consultation at the Plastic Surgery Clinic

<table>
<thead>
<tr>
<th>Year</th>
<th>2006-2010</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (mean in years)</td>
<td>2,7</td>
<td>2</td>
<td>3,1</td>
<td>3</td>
<td>3,1</td>
<td>2,1</td>
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Fig. 1b. Status post resection of the tumour and covering the loss with a flap based on the right superficial temporal artery

Fig. 1c. Status post completed treatment
DISCUSSION

In recent years, there have been observed increasing incidence of skin neoplasms (3, 11, 13). Publications indicate that in approx. 70% of patients, skin cancer develops on the face and neck, and thus the body parts most exposed to UV radiation and also enabling noticing them by the patients themselves and the people around them (11). Such a tumor localization may be the cause of functional and aesthetic disorders, which in turn has a negative impact on the quality of life of patients (3).

Basal-cell carcinoma (BCC) is the most common malignant tumor in humans (2, 11, 12, 13). Its incidence increases with age and it usually does not develop before the age of 50, as well as it affects women less frequently (11, 12). The conducted study is in agreement with the data from literature. In a group of 123 patients, the most common diagnosis was basal-cell carcinoma (n = 97), and the majority of patients were men (n = 72) above the age of 50.

The widely recognized method of BCC treatment is surgical excision and verification by histopathology (3, 11, 13, 14). In the majority of patients, particularly at the initial stage of the neoplasm, surgery is relatively simple and ensures radicalness with the ensuring of adequate margins (12). Advanced cases associated primarily with large tumor size present bigger surgical difficulties in achieving satisfactory functional and/or aesthetic result. Fat-tah and colleagues are of the opinion that large tumor sizes stem more from disregarding the problem than from a rapid growth of the lesion, while late reporting to a physician impacts the poor prognosis (11). Extensive BCC, involving particularly the facial skeleton, may be the cause of functional, anatomic and aesthetic problems and require multi-team specialist treatment (11, 12). Among the patients described by us, 5 required a multi-specialist approach with the use of several-stage surgical treatment. In all patients, the history was over 10 years.

In recent years, the problem of undertaking proper treatment in different neoplastic diseases was the subject of numerous studies (15-20). Many authors note that this delay is a multi-factor issue and may stem both from late reporting of the patient to a physician and from causes dependent on the organization and quality of health care (e.g. the time of waiting for diagnostic examinations and/or the result of the histopathological examination as well as incorrect referral of patients by the primary care physicians) (15, 16, 17). Renzi and colleagues have found that the delay in starting the treatment in cases of planoepithelial carcinoma is longer if this lesion develops within the existing skin lesions, e.g. birthmarks. Meanwhile, significant shortening of time to undertaking treatment was observed in patients in whom the primary care physician recommended surgical removal of the lesion during the first visit (18). Other authors indicate that the main reason of late treatment in different types of neoplasms is dependent on the patient and the solution to this problem could be better education of the society (15, 17). The problem of delayed reporting for treatment of patients with skin neoplasms was also analysed by Blackford and colleagues. The authors conducted a study on a group of 37 patients with basal-cell carcinoma, aimed at determining the impact of the neoplasm on the patient life. The mean time from the appearance of a skin lesion to the doctor’s visit was over 2 years (range: 1 month to 20 years). The

<table>
<thead>
<tr>
<th>Histological type of neoplasm</th>
<th>2006-2010</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal-cell carcinoma</td>
<td>97</td>
<td>12</td>
<td>19</td>
<td>19</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>Planoepithelial carcinoma</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Squamous cell carcinoma</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Papilloma planoepithelial hyperkeratoticum</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Melanocytic nevus</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Melanoma</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>13</td>
<td>22</td>
<td>24</td>
<td>36</td>
<td>28</td>
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study tol were psychological tests measuring among others the quality of life. The analysis performed by the authors indicates that the neoplasm development has little negative impact on the quality of life of patients. This may explain why the time between the appearance of an alarming lesion and the reporting for a medical consultation is so long (21).

Own studies indicate that the delay in surgical treatment of skin neoplasm in a group of Polish patients is even longer and stands at close to 2.7 years on average. It seems that the main reason for this delay is mainly the fear of surgery. We agree with the authors that social education is needed aimed at the understanding of threats stemming from the development of skin cancer.

Some authors believe that an alternative and less invasive method of treating skin tumours, one which does not produce adverse effects, is photodynamic therapy (PDT) (13, 22, 23, 24). This method, in the opinion of physicians and patients, gives satisfactory results (13, 22, 24). However, some limitations are present for this type of approach – the patient accepts the lack of possibility of histopathological verification of procedure fullness and grants the consent to regular check-up examinations for the period of a minimum 5 years (22). This is why photodynamic therapy should remain a method reserved for some patients only. Such a treatment may be indicated for instance in patients with a history of heart disease or haematological disorders, and in patients not consenting to surgery (13). Good therapeutic results with the use of PDT are achieved in cases of nodular and superficial form of basal-cell carcinoma (13, 24). Meanwhile, of broader use is photodynamic diagnostics which determines precisely the extent of neoplastic lesions in the skin and may in this way determine the optimal margin of surgical incisions not precluding the possibility of histopathological verification of fullness of lesion resection (23).

CONCLUSIONS

1. The most common cause of delayed reporting to a physician by a patient with a neoplasm is fear of surgery.
2. The conviction of facilitated neoplasm dissemination through surgical treatment of a skin lesion is common in our society, particularly among the elderly.

REFERENCES