TREATMENT OF SKIN CANCER WITH ALTERNATIVE MEDICINE METHOD

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ABSTRACT

More people are diagnosed with skin cancer each year in the world. Albania has a high incidence rate of people diagnosed with this disease in the last three decades. In the present paper, 260 patients in total diagnosed with skin cancer underwent medical treatment using NILS (extracts of some Albanian plants *Allium sativum*, *Juglans regia* and *Laurus nobilis)* at the ALMS "STROKA" Clinic from June 2015 to June 2017. The age of the patients varied from 9 to 99 years old. Diagnosis was established based upon the signs and symptoms, dermoscopy and biopsy. The treatment period varied from 1 to 6 months, depending on patients' regenerative abilities. On average, the treatment period was 2 months until complete healing of the lesion and consisted of 7-10 sessions as recommended by the treating physician and depending on the tumor mass characteristics. Because it is an open medication, since the first sessions, we could see a shrinkage and reduction of the cutaneous lesion size, up to the total disappearance of the lesions at the end of the treatment. At this point, the treatment with NILS was interrupted, because the natural layers breakaway ended, and the process of regeneration of normal skin started. Once the treatment period ended, the patients were advised to be under control on a regular basis for a period of 3 years.

Keywords: skin cancer, diagnosis, treatment, medicinal plants, alternative medicine

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1. INTRODUCTION

There are two main types of skin cancer - non-melanoma and melanoma - along with some much rarer types. Non-melanoma is more common, and it's much less likely to spread. The most common non-melanoma tumours are basal cell carcinoma and squamous cell carcinoma. Melanoma of the skin is the 19th most commonly occurring cancer in men and women. There were nearly 300,000 new cases in 2018. Non-melanoma skin cancer (NMSC) is the 5th most commonly occurring cancer in men and women, with over 1 million diagnoses worldwide in 2018 (https://www.wcrf.org/dietandcancer/cancer- trends/skin-cancer-statistics).

The number of skin cancer affected people and in particular people suffering from Malignant Melanoma (MM) has significantly increased over the years even in Albania. The European countries with the lowest estimated incidence in melanoma were Moldova, Bosnia and Herzegovina and Albania, with nearly 3.4 per 100,000. The European countries with the highest estimated mortality were Norway, Slovenia and Sweden, compared with the European average of 2.3 deaths per 100000 PY. Bosnia and Herzegovina, Malta and Albania had 0.7 deaths per 100,000 with the lowest estimated mortality rates from MM among the European countries in 2012 (https://encr.eu/sites/default/files/factsheets/ENCR_Factsheet_Malignant_Melanoma_2015.pdf.).

Populations at risk are those with fair skin freckling, tendency to sunburn with high number of sunburns in life, red/blond hair, or having a high number of nevi (or moles) or any number of atypical nevi, or a history of organ transplantation, and/or taking immunosuppressive medication regimens (Vinzón*et al*., 2014). The high incidence of ultraviolet radiation and increased exposure to it by the population during childhood and adolescence, through sunburns and clothes exposing large body areas may be one of the factors, as well as the socio-economic level (Pereira*et al*., 2015). Patients at high risk may include those having a previous history of cancer or other risk factors, such as having atypical nevi or many common nevi, having a family or personal history of skin cancer, occupational exposure, or intense exposure such as indoor tanning (Watson*et al*., 2017).

In comparison to UVA radiation, UVB is more lethal and acts as a complete carcinogen (Singh*et al*., 2014). NMSC can be caused by ionizing radiation arising in sites of chronic radiation damage, chronic inflammation, hydrocarbons(tar), and chronic ingestion of inorganic arsenic; these tumors can be much more aggressive than those associated with UVR or HPV (Fitzpatrick*et al*., 2005). First, we are targeting the three primary factors needed to result in reduced risk of serious skin cancers: i) patient skin self- examinations; ii) physician full-body skin exams; and iii) rapid access to dermatologist evaluation of worrisome lesions (Daniel*et al*., 2015).

Cutaneous epithelial (NMSC) are the easiest of all cancers to diagnose and treat (Fitzpatrick*et al*., 2005). The clinical diagnosis of skin cancer is based on visual examination followed by biopsy of suspicious lesions (Lui *et*

al., 2012). The search to improve our clinical diagnostic accuracy for identifying skin cancer and to minimize unnecessary skin biopsies has led to the development of non-invasive imaging techniques, where RCM features of common melanocytic and non-melanocytic skin neoplasms such as melanoma, actinic keratosis/squamous cell carcinoma, basal cell carcinoma, and nevi have been well defined and show good correlation with dermoscopic and histopathologicfindings (Ahlgrimm-Siess*et al*., 2018).

Equally important, we will attempt to narrow the interval from first detection of suspected skin cancer to treatment through the added dimension of teledermoscopy, which provides highly accurate preliminary information about the morphology of a lesion and can, in turn, lead to expedited care if needed (Daniel *et al*., 2015). To compare Raman spectroscopy in distinguishing: i) malignant and premalignant lesions from benign disorders,
ii) melanomas from benign pigmented skin lesions, and iii) melanomas from seborrheic keratoses with other non-invasive diagnostic techniques as well as with clinical diagnosis by visual examination, we calculated skin biopsy ratios at sensitivity levels of 90%, 95%, and 99%, respectively (Lui *et al*., 2012). In vivo RCM has been shown to increase the accuracy of non-invasive diagnosis of common skin neoplasms, and is a valuable adjunct to dermoscopy, particularly in cosmetically and functionally sensitive areas such as the face or the genital area (Ahlgrimm-Siess*et al*., 2018). An Australian study found that the clinical diagnosis of skin cancers and precancers was associated with a sensitivity of 63.9% for BCCs, 41.1% for SCCs, and 33.8% for malignant melanomas (Lui *et al*., 2012). Dermoscopy has limited utility when it comes to the diagnosis of pink, erythematous, non-pigmented skin lesions (Ahlgrimm-Siess*et al*., 2018). With dermoscopy, the sensitivity to diagnose melanoma is 85 %and better compared to 65 to 80% when the technique is not used (Johr*et al*, 2015). Dermoscopy helps to differentiate melanocytic from nonmelanocytic skin lesions to differentiate benign from malignant skin lesions (Johr*et al*.,2015). Many melanomas may appear banal and therefore be overlooked, whereas benign pigmented lesions can sometimes show clinically suspicious features on visual examination and therefore be unnecessarily biopsied (Lui *et al*., 2012).

The two principal NMSCs are basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) (Fitzpatrick*et al*., 2005). The analysis presented here focuses specifically on those diagnostic classes of skin lesions that characteristically give rise to patient and physician concern over skin cancer, including: i) malignancies and premalignancies that require treatment: malignant melanoma, SCC, BCC, and actinic keratosis, and ii) benign conditions that can visually mimic skin cancer: seborrheic keratosis, atypical nevi, melanocytic nevi (junctional, compound, and intra-dermal), and blue nevi (Lui *et al*., 2012). Metastatic cancer to the skin is characterized by solitary or multiple dermal or subcutaneous nodules, occurring as metastatic cells from a distant non-contiguous primary malignant neoplasm, that are transported to and deposited in the skin or subcutaneous tissue by hematogenous or lymphatic routes, or by contiguous spread across the peritoneal cavity or other tissues (Fitzpatrick*et al*., 2005).

The treatment of skin cancer includes some options, such as freezing, excisional surgery, Mohs surgery, curettage and electrodesiccation or cryotherapy, radiation therapy, chemotherapy, photodynamic therapy and biological therapy.260 patients with MM and NMSC have undergone the treatment with an alternative method which is inherited and enriched in some generations by using NILS, the herbal solution that has come to be perfected from generation to generation to these days.

The present paper aims at evaluating the results obtained by applying the alternative medicine to patients diagnosed with skin cancer.

2. MATERIALS AND METHODS

In the present paper 260 patients in total diagnosed with skin cancer underwent medical treatment using NILS (extracts of some Albanian plants *Allium sativum*, *Juglans regia* and *Laurus nobilis)* at the ALMS “STROKA” Clinic from June 2015 to June 2017. 185 cases were reported with Basal Cell Carcinoma (BCC), 65 cases with Squamous Cell Carcinoma (SCC), 9 cases with Malignant Melanoma (MM) and 1 case with Porocarcinoma. The age of the patients varied from 9 to 99 years old. Diagnosis was established based upon the signs and symptoms, by dermoscopy and biopsy. 14,6% of the patients were diagnosed through biopsy at the Centre hospitalier regional universitaire de Besançon, University Medical Centre of Tirana "Mother Teresa", University Clinical Centre of Kosovo, etc. and their treatment was carried out at these hospitals centers but were referred to our clinic because of relapses.

The treatment was performed locally by applying the solution on the tumor surface. The treatment consisted

in dying the lesion by using extracts of some Albanian plants (Allium sativum, Juglans regia and *Laurus nobilis*) called NILS. NILS has fluid consistency and brown color. Diagnosis was established based upon the signs and symptoms, dermoscopy and biopsy. The treatment period varied from 1 to 6 months, depending on patients' regenerative abilities. On average, the treatment period was 2 months until complete healing of the lesion and consisted of 7-10 sessions as recommended by the treating physician and depending on the tumor mass characteristics. This treatment was applied once a day and took at least 10 to 30 minutes in large- scale lesions. The first week had the most frequent sessions (3-4 times a week), followed by the second week (2-3 times a week), and after that the number of NILS treatment sessions was reduced or interrupted, because the natural layers breakaway ended, and the process of regeneration of normal skin started. Cases were accompanied by photos in different phases of the treatment from the beginning to the end. In general, tumor diameter was > 5 mm (from 7- 70 mm and the thickness up to the level of the skin was 3-30 mm) and mostly ulcerated (Photo1, 2, 3).

Photo 1 Lip lesion treatment phases of the same patient.

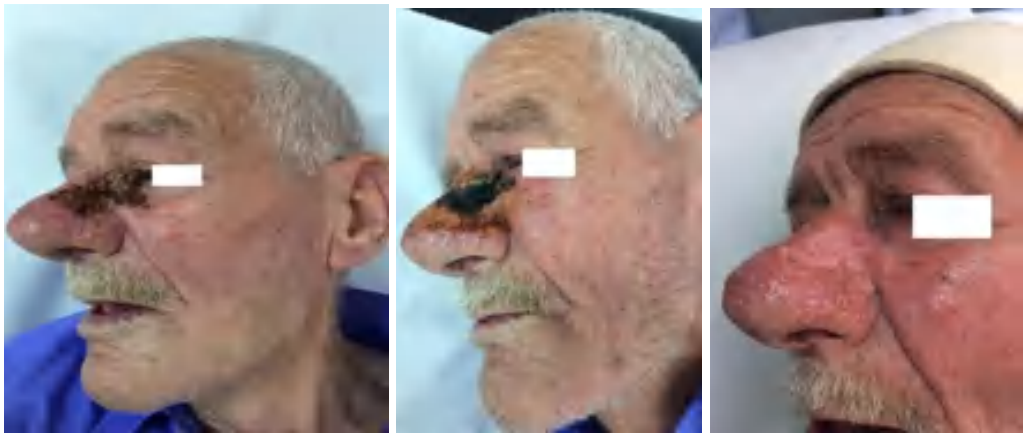


Photo 2. Nose lesions treatment phases.

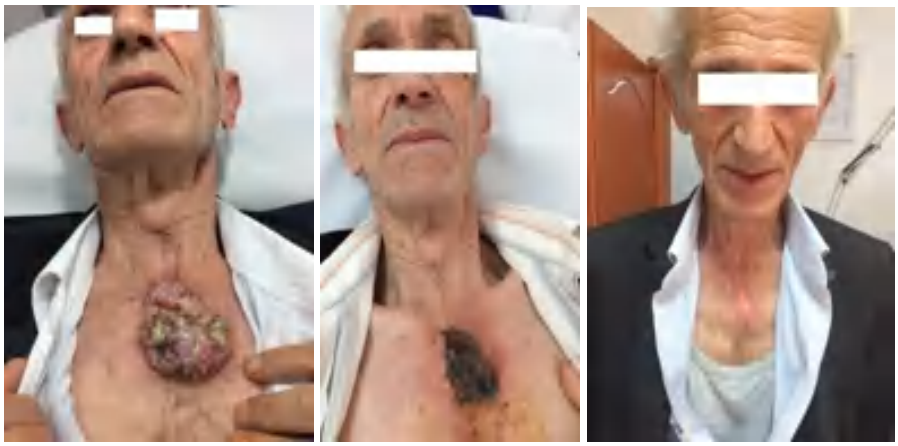


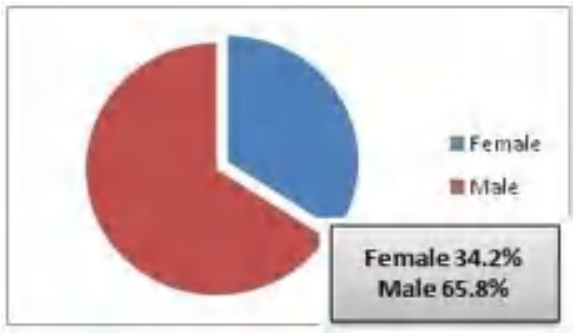
Photo 3. Chest lesions treatment phases.

3. RESULTS

Shrinkage and reduction of the cutaneous lesion size was reported in the first sessions and the total disappearance of the lesions at the end of the treatment. Neither undesirable side effects on elderly patients, nor those with chronic cardiovascular, pulmonary, gastrointestinal, metabolic and endocrine disease and no toxic effect to any patient was reported. Local pain was caused by the product applied over mostly ulcerated wounds, headache in sporadic cases, but associated with the use of 100 mg of aspirin when the lesion was from the level of the upper lip and above, swelling when extended sessions were conducted on the area around the eye, and sneezing when the patient was allergic to the herbal content of the product, but which was transient and ended at the end of the treatment. These undesirable side effects were observed on a limited number of patients. No toxic effect from the local application of NILS has ever been observed. Table 1 reports skin cancer classification based on age group. Graphic 1 plots skin cancer classification based on gender. Table 2 reports skin cancer treated for the first time and skin cancer treated earlier with surgery and / or radio therapy.

Table 1 Skin cancer classification based on age group

Age group	Percentage of patients
0-20 years	0.4 %
21-40 years	2.7%
41-60 years	27.3%
61-80 years	56.5%
>80 years	13.00%



Graph 1: Skin cancer classification based on gender

Table2. Skin cancer treated for the first time vs. skin cancer treated earlierwith surgery and / or radio therapy

Treated for first time in our clinic	85.4%
Treated before with surgery or/with radiotherapy	**14,6%**

Table3. Skin cancer classification based on affected area

Location of the lesion	%
Head and neck	80 %

Body and extremity	20%

4. DISCUSSIONS

Cancer is a major burden of disease worldwide. Positive results and commitment to providing the highest standard of care to the patients make the alternative medicine a success story. Cases of treatment failure are reported, however, due to lack of cooperation and unfollowing of antiseptic rules from our patients during home treatment.

Dermatologists, surgeons and skin cancer doctors are faced with an epidemic of skin cancer in Australia and New Zealand, given the need to reduce unnecessary surgery as well as associated costs, have turned their focus to topical applications to deal with skin cancer (Tampa 2016).

Ingenolmebutate, hypericin, coffee, tea, black salve, bloodroot, paclitaxel, and beta-carotene have been studied for their effects on NMSC in humans or have been reported to be used in humans with BCCs and SCCs. Clinical trials assessing the effectiveness of ingenolmebutate on BCCs and SCCs and case reports with patients using paclitaxel for BCCs suggest efficacy of these agents for treating NMSCs in humans, black salve and bloodroot were reported to be more harmful than therapeutic (Millsop*et al*., 2013).

5-fluorouracil has been around since the 1960s and it acts as an antimetabolite, Diclofenac, an NSAID, acts by downregulating cyclooxygenase enzymes and increasing apoptosis. Topical diclofenac 3 % gel in 2.5 % hyaluronic acid acts by reducing dysplastic keratinocytes in cancerous lesions. Ingenolmebutate has a dual action: the induction of rapid cellular death in the treated area, followed by an inflammatory response, able to eliminate residual cells. In many studies,imiquimod (INN) has shown itself effective against skin cancers and pre-cancerous lesions. Therefore, while imiquimod has been added to our topical armamentarium with respect to skin cancer management, caution must be exercised in prescribing this treatment, and it is especially important to follow-up patients regularly. In recent times Imiquimod has been shown to paradoxically cause tumours, or more precisely tumors have been reported on bodily sites of treatment. Some prevailing topical treatments include 5-fluorouracil, diclofenac sodium, topical photodynamic therapy (PDT) with 5-aminolevulinic acid (ALA) treatment site. The reports of Imiquimod causing aggressive SCC, or in one case, an invasive melanoma arising at the site of topical Imiquimod use, suggest follow-up (Tampa 2016).

Skin Cancer

In the present paper, 260 patients in total diagnosed with skin cancer (from 7- 70 mm in diameter and the thickness up to the level of the skin was 3-30 mm and mostly ulcerated) underwent medical treatment involving NILS (extracts of some Albanian plants *Allium sativum*, *Juglans regia* and *Laurus nobilis)* at the ALMS "STROKA" Clinic from June 2015 to June 2017.

In most cases, patients underwent the treatment when the size of the lesion became worrying, it started blooding or draining purulent secretions, or after previous unsuccessful treatments. From the first sessions of the treatment, the lesion significantly reduced in size, bleeding and drainage stopped. In the end,the lesion disappeared.

Over 3 million new cases of skin cancer are diagnosed in the US annually (Diaoand Lee 2014). Skin cancer is an increasingly important global public health problem (McWhriter and Hoffman-Goetz 2006). Epidemiological data show a continuing increase in the incidence of non-melanoma and melanoma skin cancers (Schalka*et al*., 2014). Incidence, however, varies by latitude and altitude, with regions closer to the equator and higher in altitude generally having higher rates of skin cancer (Kasparian *et al.*, 2012). The skin is considered as the largest organ in the human body, and it protects against heat, sunlight, injury, and infections (Penta *et al.*, 2017). Actinic keratoses (AK) are precancerous lesions that increase the risk of skin cancer in patients with chronic sun damage and/or immunosuppression (Maytin*et al*, 2018). Genetic factors strongly influence the risk of skin cancer (Watson *et al*, 2016). Viruses are another agent which transforms keratinocytes by activation of cancer-promoting genes (Singh *et al*.,2014). The skin is the most frequent location of primary malignant neoplasms (Duarte *et al*., 2018). Skin cancers can be classified depending on the involved cell type: keratinocytes andmelanocytes (Gálvez*et al*.,2018).

Skin cancer (including malignant melanoma, squamous cell carcinoma, and basal cell carcinoma) is a common disease in all European-derived populations and has shown increases in incidence over the

last century (Kasparian *et al*.,2012).

The pathogenesis of skin cancer requires both genetic and nongenetic molecular alterations (Ming *et al* 2014). Latinos have the highest rate of skin cancers among U.S. minorities (Rodríguez *et al*.,2018). Skin cancer among women under 40 years of age has been observed to be increasing in both cases with single and multiple lesions and those, malignant skin neoplasms were the most frequent in men (Pereira *et al*, 2015). However, studies analysing specific risk factors for skin cancers, such as skin complexion, eye colour, andskin response to sun exposure are limited (Gadalla*et al*, 2017).

The lifetime cost of the 150,000 incident cases of skin cancer diagnosed in NSW in 2010 is estimated at $536 million ($44,796 per melanoma and $2459 per non-melanoma) (Doran *et al.*, 2015).

The pathogenesis of skin cancer requires both genetic and nongenetic molecular alterations (Ming *et al*., 2014). Cellular secretion is an important mediator of cancer progression (Almiron*et al*.,2018). The incidence of skin cancer increases with age (Doran *et al*., 2015).

Non-Melanoma Skin Cancer

185 cases were reported with basal cell carcinoma (BCC), 65 cases with squamous cell carcinoma (SCC), 11 out of which suffered from lip cancer. The patients with a single lesion were rare. In most of the cases the patients had at least 2 or 3 lesions. The disease had generally advanced or advanced years after lesion's appearance and the standard treatment proved to be ineffective. In these cases, the patients had an extended follow–up with subsequent positive results. Seven non-melanoma skin cancer including one with lip cancer resulted in NILS treatment failure.

Basal cell carcinoma (BCC) is the most common form of skin cancer followed by squamous cell carcinoma (SCC) (Doran *et al*, 2015).

A long-standing, slow-growing and painless tumor should be suspected for BCC (Katsambas and Lotti 2010). Basal cell carcinoma (BCC) is a skin cancer derived from nonkeratinizing cells that form the basal layer of epidermis (Rigel *et al.*, 2011).

The most common are basal cell carcinoma and squamous cell carcinoma (Diaoand Lee 2014). These categories are also widely known as non- melanoma skin cancer (NMSC), with a higher incidence rate, and melanoma skin cancer (MSC), with a higher mortality rate, respectively (Gálvez*et al*., 2018). Risk for BCC varied based on type of skin cancer in relatives, age of onset in relatives, and degree of affected relatives (Berlin *et al*., 2015). Squamous cell carcinoma (SCC) and basal cell carcinoma (BCC) account for over 90% of skin cancers in organ transplant patients, and affect over 50% of white transplant recipients (Diao and Lee 2014).

Cutaneous squamous cell carcinoma (SCC) is a malignancy arising from epithelial keratinocytes (Rapini 2005). Actinic keratoses (AK) are very common premalignant skin lesions (presquamous cell carcinoma) in patients with chronic sun damage (Maytin*et al.*, 2018). The typical lesion (of SCC) is an indurated, firm, raised, skin-colored or pink to red nodule, whose growth can progress rapidly when extensive ulcerative necrosis occurs (Giannotiand De Giorgi 2010). Squamous cell carcinoma is the second most common type of skin cancer (Singh *et al*., 2014). Margins of induration are usually poorly defined (Giannotiand De Giorgi 2010).

Squamous cell carcinoma (SCC) of the skin is the most aggressive form of non-melanoma skin cancer (NMSC), and is the single most commonly diagnosed cancer in the U.S., with over one million new cases reported each year (Yin*et al*., 2006). Oral squamous cell carcinoma (OSCC) remains a global health problem (Chen *et al*., 2018). It is easily treated when detected early, but in a small percentage of cases this cancer has metastasis potential (Singh *et al*, 2014). The initiation and development of oral SCC is caused by a combination of genetic alterations, environmental risk factors and viral infection (Zhao *et al*., 2018). SCC was associated with a 24% risk increase in women but little to no association in men; BCC was associated with a 25% risk increase in women and 17% in men (Rees *et al*., 2018).

Malignant Melanoma

Only 9 cases were diagnosed and treated with malignant melanoma,8 of which were ulcerated,but without palpable lymph node. In Malignant Melanoma the treatment was more painful,but NILS absorption was more rapid and lesion reduction was more noticeable. Due to the depth treatment,the recovery time was extended,especially in the scalp and abdominal skin.

Melanoma, a subtype of skin cancer that can be fatal if the disease is not detected and treated at an

early stage, is the most common cancer among those aged 25–29 years and the second most common cancer among adolescents and young adults aged 15–29 years (Diaoand Lee 2014). The early diagnosis of skin melanomas is usually determined by using ABCDE signs (Gálvez*et al.*, 2018). Melanoma is the deadliest form of skin cancer that is derived from the uncontrolled growth of melanocytes derived from neural crest cells (Shin *et al.*, 2018). Malignant melanoma or black skin cancer originates from the transformation of melanocytes or naevus cells (Baldaand Starz 2010). Melanocytes, cells found in the basal layer of the skin and give the skin and eyes their colour, are genetically programmed to produce a specific amount of melanin (Watson *et al.*, 2016). Melanoma was the most costly skin cancer diagnosis (Qureshi 2011). Although melanoma accounts for only 4% of diagnoses of skin cancer, it accounts for 80% of skin cancer-related deaths (Qureshi 2011). In addition to skin tone, melanoma risk is associated with total nevi count (Watson *et al*, 2016). A comprehensive meta- analysis has demonstrated that increased sunburns from childhood, adolescence, and adulthood all increase the risk of melanoma (Diaoand Lee 2014).

For participants with no history of melanoma, the likelihood of engagement in SSE (skin self-examination) at least once per year increased amongst those with one or two, or more than five moles greater than 6 mm in diameter, as well as those with greater perceived risk of developing skin cancer, perceived severity of skin cancer, perceived benefits of SSE, self- efficacy, and social norms (Kasparian *et al.*,2012). Another physical feature that is an independent risk factor for melanoma occurrence is the high number of melanocytic nevi and/or the presence of atypical nevi (Diaoand Lee 2013).Skin melanoma is less common and is associated with high metastasis and mortality rates (Pereira*et al.*,2015). Malignant melanoma accounts for less than five percent of skin cancer cases, yet it represents the vast majority of skin cancer deaths in Australia (Doran *et al*,2015). Family history of melanoma; having one first-degree relative (FDR) doubles one's risk, and three or more FDRs increases risk by 35–70 times (Diao*et al*,2013). Previous personal history of skin cancer; with melanoma patients having an elevated risk of 4%–9% for developing another primary melanomahas been reported in (Diaoand Lee 2013). Skin melanoma was most common among women (single or multiple lesions) (Pereira *et al*, 2015). Light skin pigmentation, blond or red hair, blue or green eyes, and prominent freckling tendency are phenotypic features associated with an increased risk of melanoma (Diaoand Lee 2013). Nearly half of the patients with stage IV melanoma develop brain metastases (Rodenburg*et al.*, 2016).

Aetiology and prevention

More than one million new skin cancers are diagnosed yearly in the United States creating the need for effective primary and chemo-preventive strategies to reduce the incidence, morbidity, and mortality associated with skin cancer (Einspahr*et al.*,2002).

Diets high in fruit, vegetables,grains and legumes appear reduce the risk of a number of diseases, including cancer (Balch and Balch 2000). Poor diet and obesity, smoking and genetics includes 70 % of cancerous factors (Balch and Balch 2000).

Physical activity is associated with a nearly 40% reduction in the cancer risk associated with chronic diseases (Huakang*et al*, 2018).

Supplementation with vitamin D did not result in a lower incidence of invasive cancer or cardiovascular events than placebo (Keaneyand Rosen 2017; Manson *et al*., 2018). Supplementation with O−3 (also called omega-3) fatty acids did not result in a lower incidence of major cardiovascular events or cancer than placebo (Manson*et al*., 2018). Although opinions are controversial, in two other studies higher vitamin D concentration was associated with lower risk of total cancer (Budhathoki*et al.*, 2018) andhigher intake of marine O−3 fatty acids has been associated with reduced risks of cardiovascular disease and cancer in several observational studies (Manson *et al.*, 2018).

In general, participants across groups reported that skin cancer was preventable (Rodríguez*et al*,2018). Considerable efforts have been made to identify the phytochemicals which may possibly act on one or several molecular targets that modulate cellular processes such as inflammation, immunity, cell cycle progression, and apoptosis (Singh *et al.*,2014). Two most studied phytochemicals such as sulforaphane and tea catechins/epicatechins have epigenetic regulations in the prevention and therapeutics of skin cancer (Penta *et al.*,2017). Phytochemicals have antioxidant, antimutagenic, anticarcinogenic, and carcinogen detoxification capabilities, thereby considered as efficient chemo-preventive agents (Singh *et al.*, 2014). The use of bioactive dietary phytochemicals against various

diseases including cancers remains attractive in the field of dietary cancer prevention and therapy (Penta *et al.*, 2017).

A diet rich in naturally occurring phytochemicals such as flavonoids, polyphenols, and other nutrients play a crucial role in maintaining normal health as well as in different pathological processes (Penta *et al.*, 2017). Fruits, vegetables, seeds, flowers, leaves, and bark represent huge reservoirs of phytochemicals such as polyphenols, flavonoids, isoflavonoids, proanthocyanidins, phytoalexins, anthocyanidins, and carotenoids (Singh *et al.*, 2014). Tea (Camellia sinensis; Theaceae) has been consumed as a popular beverage worldwide and skin photoprotection by green tea polyphenols (GTPs) have been widely investigated (Singh *et al.*,2014).

Several natural bioactive phytochemicals have been shown to exhibit epigenetic modulatory capability and act as chemo-preventive as well as therapeutic agents (Penta *et al.*, 2017). Likewise, these natural agents in combination with sunscreens or skin care cosmetics may offer a rational approach for reducing skin cancers and other skin diseases (Singh *et al.*, 2014).

Treatment

Not always success has been achieved. Most patients appear for medical help in very advanced stages of the disease. This and the wrong treatment option are the two main causes of failure.However, in case of advanced stages of cancer, surgery will not help in controlling the deadly disease, wherein the cells get metastasized into distinct body organs such as lymph, lung, and liver (Penta *et al.*,2017). In the process of tumour progression, one of the primary functions of the blood and lymphatic vascular networks is to help tumour cellsescape immune surveillance (Wang *et al.*, 2017).

Retinoids influence epidermal differentiation and are used to treat and prevent skin cancer, therefore, with further investigation, TIG-3 may become the first molecular marker of aggressiveness and of retinoid action during treatment or chemoprevention studies (Duvic*et al.*,2000). They have been studied extensively for their potential as therapeutic and chemo-preventive agents for a variety of cancers, including nonmelanoma skin cancer (NMSC) (Cheepala*et al.*,2009). The current chemotherapeutic agents for the treatment of skin cancer are associated with several adverse effects (Penta *et al.*, 2017). Anecdotal evidence suggests that non-surgical treatment has increased since 2002 for superficial BCC with imiquimod in particular (Doran *et al.*, 2015). Recently, physicians have been empirically combining two treatment approaches, topical 5-fluorouracil (5FU) and photodynamic therapy (PDT), but without any scientific basis (Maytin*et al.*, 2018).

Most of the alternative treatments used in cancer therapy fall into one of the following categories: biologic and pharmacologic therapies, immunologic therapies, herbal therapies, metabolic therapies, mind-body therapies, and nutritional therapies (Balch and Balch 2000). Alternate the following in your cancer prevention or cancer therapy program: astragalus, birch, burdock root, cat's claw, chaparral, chuchuhuasi (a rainforest herb), cranberry, dandelion, echinacea, fennel, green tea, licorice, macela, milk thistle, parsley, paud'arco, red clover and suma (Balch and Balch 2000). The use of herbs for medicinal purposes has increased dramatically over the past decade (Tierney *et al*,2003). Agents that are commonly used include green tea, echinacea, essiac tea, flaxseed, mistletoe, and coenzyme Q, as well as others (Tierney *et al.*,2003).

Surgery is the prime treatment for NMSC: more than 70 % of the BCC lesions recorded in the 2002 National Survey were surgically excised (Doran *et al.*, 2015). Direct costs accounted for 72% of costs ($10,230 per melanoma and $2336 per non-melanoma) and indirect costs accounted for 28% of costs ($34,567 per melanoma and $123 per non-melanoma) (Doran *et al.*, 2015). Direct costs include the management of skin cancer from diagnosis, follow-up treatmentand refer to the utilization of health care resources such as hospital, medical and allied health care services, while indirect costs reflect the lost productivity resulting from an individual's inability to work (morbidity costs such as sick leave and early retirement) and premature mortality (defined as death before the age of 65years, the upper limit of the working age in Australia) (Doran *et al.*,2015).

The local treatment with NILS including the diagnosis, treatment and follow-up, starts at 200 Euro for NMSC and 1000 Euro for Melanoma, while for large size lesions the cost dependsonthe location, ulcerating form etc.

Complementary and alternative medicine have played an increasing role in the treatment of many diseases, including skin cancer. The therapeutic uses of garlic in cancer have been widely studied, as well

as several other phytochemicals also have been reported for their imperative effects against skin cancer (Singh *et al.*, 2014). Many phytochemicals such as sulforaphane, tea catechins/epicatechins, curcumin, and resveratrol have been shown to haveantimelanoma activity (Penta *et al.*, 2017).

The use of NILS in both early and advanced stages of the disease proved to be effective in cases of BCC, SCC and MM. Therefore, in cases when the aforementioned treatment methods are ineffective, contraindicated in the patients' health circumstances, patients suffer from Xeroderma Pigmentosum disease or Basal Cell Nevus Syndrome for which care is required time after time, refuse to receive standard medical treatment and have lack of systemic side effects and toxicity, using NILS would be advisable.

5. CONCLUSSIONS

The beginning signs of skin cancer involve a change in the skin. This may mean that a new lump or sore has formed on the skin, that a new mole has popped up, or that an existing mole has begun to grow or change in shape. There might be devastating consequences of missed diagnosis and the delayed treatment of malignancy or the unnecessary treatment of lesions. The ALMS "STROKA" Clinic in Tirana, Albania has a long history in the realm of alternative treatment in patients with malignant melanoma and non-melanoma skin cancer (NMSC). This treatment method is tailor-made for all the patients and in particular for the inoperable patients, patients that underwent surgery, radiotherapy, etc. Alternative treatment is applied to patients when the skin tumor has not affected the nearby lymph glands, bones and various organs. In 7 cases cancer was found in an aggressive form and indomitable from NILS. The patients were diagnosed with BCC and SCC. There are cases with prolonged illness, ulcerated and moisturized tumor. In these cases, the patients underwent corticotherapy or radiotherapy etc. This treatment generally avoids skin transplantation at the tumor site.

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