DERMATOLOGICAL NEOPLASMS AND MELANOMA

Dermatological Neoplasms

Dermatological neoplasms are malignant new growth arising from exposed parts of the body. There is a significant higher rate of occurrence among Caucasians than non-Caucasians, indicating pigment deposition of the skin is a natural protection from skin cancers. Skin cancer in China, is more prevalent in coastal areas and the mountainous regions. The main types of cancer of the skin are squamous cell carcinoma and basal cell carcinoma. The remaining ones are classified as intraepidermal carcinomas. The majority of cases of dermatological neoplasm in China are squamous cell carcinomas, with basal cell carcinoma only 10% of the total. Among Caucasians there are four to five time more cases of basal cell carcinoma than squamous cell carcinomas.

The etiology of this disease remains undetermined although exposure to the physical and chemical agents, sunlight, ultraviolet ray, X-ray and coal tar, have been considered causal for the chronic skin diseases seroderma pigmentosa, keloids and intractable ulceration.

1. Clinical Manifestations

Skin cancers are composed of various cell types and are manifested differently in pathological changes, clinical symptoms and prognosis.

1.1 Squamous Cell Carcinoma

The most common skin cancers; are found predominantly in the temporal region, anterior of the ears, scalp and back of hands. Skin cancers are secondary to irradiation or come from keloids, tip of the sinus, or chronic ulcerative changes and are usually squamous type. Initially the lesion appears as a verrucous lesion, or small slightly red w yellow nodes with keratinized spikes on the top, followed in a few weeks or few months, by erosion and scar formation. Ulcerations manifest themselves in different degrees, usually with hardened edges. Shapes range from flat ulceration, nodular elevations, wedge like evasive ulcerations, and elevated and out-turned border to large tumors resembling cauliflower. Local tenderness is usually associated with the presence of infections. Vertical invasion or infiltration of the tumor can lead to destruction of muscles or bona. Tumors grow more slowly, metastasis to regional lymph nodes late in the course of the disease, and blood borne metastasis seldom occurs.

1.2 Basal Cell Carcinoma

In China, this type of carcinoma appears less frequently than squamous cell carcinoma. They have a propensity to appear on the face, particularly the periorbital region and nasal cutaneous tissue. Initial manifestation is usually a shiny, wax-like nodule or flat petechiae with a well-delineated border. After an extended period of slow growth, scaly excoriations appears on surface of the nodule. Following repetitive scar formation and excoriations, an area of shallow, central ulceration gradually develops and expands outward. This area usually transforms into a hard, pearly, wax like base, with a jagged border, turning inward with an ulcerated elevated border. Pigments in the ulceration are black nodules, known as pigmented basal cell carcinoma, and are frequently mistaken for malignant melanoma. Basal cell carcinoma generally runs a longer course than squamous cell carcinoma, some taking as long as 10 to 20 years develop.

1.3 In Situ Carcinoma

This includes Paget's disease (eczematous carcinoma) of the mammary gland, axillary fossa, external genitalia and the perennial region as well as Bowen's Disease (precancerous dermatitis). These entities grow slowly and
invade only the epidermis. Stinging and itching, with some local tenderness and bleeding usually accompany eczematous carcinoma.

2. Diagnosis

Initial diagnosis can be made based on history, location of lesion, rate of growth, behavior characteristics and unusual metastasis. Definitive diagnosis should be based on biopsy.

3. Clinical Staging

Stage I: tumor diameter less than 2cm.
Stage II: tumor diameter 2 to 5cm may have metastasis to nearby lymph nodes, size of metastatic locus less than 1cm.
Stage III: tumor diameter greater than 5cm, with deep invasion of tissues accompanied by regional lymph node metastasis.
Stage IV: general metastasis, regardless of tumor size.

4. Treatment

4.1 Localized treatment of lesion

4.1.1 Surgery: Surgical excision of the lesion should include more than 1cm of normal tissue around and under the lesion to avoid recurrence. If necessary, skin grafting and cosmetic surgery should be performed after radical resection. Unless specifically indicated, radical extirpation of regional lymph nodes is seldom performed.

4.1.2 Cryosurgery: Direct application or spray of -195°C liquid nitrogen on superficial lesions, which leads to necrosis and sloughing, and also stimulates autoimmune reactions.

4.1.3 Laser or electrocoagulation surgery: Effective for eliminating localized, small lesions.

4.1.4 Thermo acupuncture therapy: Indicated for tumors 2 or 3cm in size, located in areas inaccessible for surgery or other methods. Acupuncture needle is passed into the lesion, followed by heat conduction, with prior local anesthesia. Treatment course to be completed in stages. Objective of the procedure is to achieve necrosis and spontaneous sloughing of tumor.

4.1.5 Radiotherapy: In 1965 G. Z. Li used close range, low voltage X-ray when treating early peri-nasal and peri-orbital skin tumors. Remission rate from this series was more than 90% with an admirable cosmetic effect. In recent years, the electronic accelerator has taken its place and is indicated for lesions where surgery is difficult, or as an integral part of a combined approach for treating tumors with stable behavior, and a palliative measure for large, recurrent skin canons.

4.1.6 Piai Jing: TCM preparation for dermatological neoplasms, produced by the Dermatological Neoplasm Institute of Luyi County, Hunan Province. It is composed of Red Arsenic, 50g; human nail, 2g; human hair, 5g; Seedless Chinese dates, 70g and lime-fermented flour, 172g.

Preparation: Remove seeds from dates; mix the ground Red Arsenic, nails and hair well, then put mixture inside the dates. Cover dates with lime-fermented flour and roll into pills. Bake pills in charcoal, turning them frequently to prevent burning. Grind the finished pills into powder and sieve. Pack and seal.

Application: When lesions are ulcerated, the powder can be applied directly on the lesion. For lesions with dry surfaces, the powder should be mixed with ointment or wrapped in oiled doth and applied to the lesion. Change dressing every day or other day. Dosage of 0.5-1.0g of the powder per dressing. Application should be discontinued if a crust is forming on the surface of the lesion, and the edges are turning up and entire lesion becomes a process
mobile, which takes about ten days. The lesion sloughs off spontaneously a few days later. If lesion is larger than 5cm, a separate dressing can be applied to different parts or the lesion to avoid acute infection. Exudation from the lesion, which follows the application of this preparation, should be removed quickly and potion must be used not to apply preparation to healthy skin. Average treatment course 35 days.

4.1.7 Nong-Jieli (Monocrotaline): Prepared from the medicinal herb Nong-Jieli (Crotalaria sessiflora) which in its freshly ground form has been applied directly to lesions as a popular folk treatment of skin cancer in Shandong Province. Rushan County Hospital of Shandong Province has injected crude extracts of Crotalaria sessiflora into lesions 3 to 5ml per dose in treating skin cancer, with a resulting rate of cure of 82% of which 24% experienced a complete disappearance of the lesion. In addition, monocrotaline (biological alkaloids of Crotalaria sessiflora extracts) 25 to 50mg per dose was injected alternatively into the lesion once a day or every other day. With concomitant external application of the 40% monocrotaline ointment, this procedure resulted in an 83% rate of cure when treating squamous cell and basal cell carcinomas. 48% experienced a complete disappearance of the lesions.

4.1.8 Zodoary Injection: Local injection of Zodoary herb (Rhizoma zodoanae) extracts into the lesion can be effective in treating skin cancer. There are no side effects.

4.1.9 20% Toad Venom Ointment: External application, once a day. Necrotic changes and sloughing of the cancerous lesions will be evident by the third day, and basically cured around the 18th day. (BEHUME HOSPITAL, TSING-TAO)

4.1.10 Blromyvinr Ointment: 0.1 to 0.2% bleomycin ointment is viable for a period of 6 months at room temperature. Apply onto or twice a day, for at least one or more months. No toxic side effects occur. More effective when treating basal cell carcinoma.

4.1.11 Traditional Medicine External Bathing Prescription; Radix Sophorae Flavescentis 2Gg; Folium Hibisci 90g; Fructus Kochiae 20g; Calla Chinensis 15g and Flos Lonicerae 15g. Add 2 liters of water and boil down to a decoction of 1 liter and filter. Take necessary amount of decoction and combine with same amount of water. Use to bathe and rinse lesion. When lesions have a cauliflower appearance or are ulcerated, and have concomitant infections or suppurative pyogenic manifestations, they should be bathed once a day, followed by external application of bleomycin ointment, Piai Jing or others.

4.2 General Therapy

In cases with diffused pathological changes, irresectable lesions or distant metastasis, radiotherapy, chemotherapy and TCM should be used.

4.2.1 Chemotherapy: Commonly used agents are bleomycine and Huorouracil. Bleomycine has proven to be more effective therapeutically. 10mg of bleomycine dissolved in 4ml normal saline injected IM once every other day or twice a week, 300 to 450mg in course. This agent can also be given as IV injection or IV drip but anaphylaxis may result from this mode of administration. IM injection is recommended for reason of safety. When bleomycine is administered there is usually a febrile response which recedes spontaneously. To prevent fibrotic changes in the lungs in the lungs, a rest period of 1 or weeks is necessary when doses given have reached a total of 150-200mg. Treatment can be continued longer if there are no toxic side effects.

4.2.2 Treatment Using TCM Syndrome Differentiation: General symptoms are usually not evident in early stage of disease or when lesions are localized. They become evident in the mid to late stage of the disease, after surgery or following chemotherapy radiotherapy. The general symptoms are usually grouped as syndrome of indwelling pathogenic heat and Yin deficiency of the liver and kidney.

From Surface to Inside Body, Indwelling Pathogenic Heat: Corresponds to skin cancer with concomitant
infections or distant metastasis and the accompanying generally symptoms.

Symptoms: Skin lesions with suppurative ulcerations; pyogenic and malodorous exudation; absorbing of toxic pathogens; imbalance of Yin and Yang; bitter taste and dry mouth; low-grade fever with irritability; scant urine with red discoloration. Tongue red with occasional ecchymosis, yellow coating, pulse slightly taut to taut.

Treatment Principle: Remove pathogenic heat; nourish the interior and strengths the resistance.

Prescription:

- Herba Violae: 20g
- Radix Amebiae or Radix Lithosperm: 18g
- Herba Taraxaci: 20g
- Herba Soiani Lyrati: 25g
- Semen Coicis: 30g
- Radix Ophiopogonis: 18g
- Fructus Trichotanthis: 30g
- Poria: 15g
- Radix Astragali: 18g
- Flos Lonioeræ: 10g
- Rhizoma Atractylodis Macrocephalae: 12g
- Radix Pseudostellariae: 15g
- Radix Glehnia: 12g
- Radix Glycyrrhizae: 4g

Individual dosage to be modified on a case to case basis.

Yin exhaustion due to Chronic Disease and Yin Deficiency of the Liver and Kidney manifested in late stage of the disease, or as febrile response secondary to radiotherapy.

Symptoms: prolonged presence of skin cancer with subsequent impairment of the

Symptoms: Prolonged presence of skin cancer with subsequent impairment Yin. Radiotherapy causes such symptoms as fever and pathogenic heart, which deplete the body of vital fluids; bitter taste and dry mouth; sensation of heat felt in chest, and on palms and soles; occasional constipation, and scant urine, dizziness; general weakness; loss of appetite. Tongue slightly red or purple red, and thin yellow coating on tongue or complete absence of coating.

Treatment Principle: Nourish the Yin and replenish the Kidney, strengthen the resistance to inhibit the tumor.

Prescription:

- Radix Ophiopogonis: 15g
- Radix Asparagi: 15g
- Radix Glehnia: 12g
- Herba Dendrobii: 12g
- Radix Pseudostellariae: 15g
- Cortex Moutan: 10g
- Poria: 12g
- Fructus Trichosanthis: 20g
- Polyporus: 12g
- Rhizoma Polygonati: 12g
Fructus Lycii 128g
Semen Coicis 20g
Rhzoma Atractylodis Macrocephalae 12g
Radix Glycyrrhizae 3g
Carapax et Plastrum Testudinis 15g
Fructus Ligustiri Lucidi 15g

Individual dosage to be modified on a case to case basis.

Combined TCM and western treatment: A variety of therapeutic procedures, local or general cause different responses and complications. Symptoms of Yin-Yang imbalance are particularly prominent in the later stages of the disease. The therapeutic approach should combine the symptomatic treatments of both TCM and western medicine, to improve the efficacy of the therapy and to reinforce therapeutic effects.