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Special features of non-melanoma skin cancer in Hong Kong Chinese patients: 10 years retrospective study

Cheng SY, Luk NM, Chong LY.
Hong Kong Med J 2001;7:22-8.

A 10-year retrospective review of Chinese patients with histologically confirmed non-melanoma skin cancer (NMSC) from 1990 to 1999 was conducted in the Social Hygiene Service. Four hundred and twelve patients with basal cell carcinoma (BCC) and 116 patients with squamous cell carcinoma (SCC) were identified.

The incidence of BCC increased from 0.32 to 0.92 per 100,000 Hong Kong Chinese population in the 10-year study duration. The corresponding incidence of SCC increased from 0.16 to 0.34 per 100,000. The head and neck region was the most common site of NMSC. Pigmented BCC was the commonest presentation (60.1%), in contrast to the classic rodent ulcer in Western series.

Multiple NMSC was uncommon (3.2% for BCC and 1.0% for SCC) in the study, compared with a figure of 30% in Caucasians. Recurrence of BCC was noted in 5.4% of patients and new BCC at other sites in 8.5% of patients. The corresponding figures for SCC were both 7.7%. These frequencies were much lower than that for Caucasians. Predisposing factors for NMSC like actinic keratoses were also less frequent.

These ethnic differences suggested the need for more research into NMSC in the Chinese population.

The risk of melanoma in association with long-term exposure to PUVA

Stern RS, the PUVA Follow up Study.
J Am Acad Dermatol 2001;44:755-61.

From 1975 to 1976, 1380 patients who first received PUVA treatment for psoriasis were prospectively studied. A total of 822 patients were included in the present follow-up study after 29 February 1996. Death, loss or withdrawal from the study accounted for the remaining 558 patients.

The 822 cohort members were followed up on average for 20.2 years before 29 February 1996 and 2.25 years afterwards. Three hundred and sixty (44%) were exposed to at least 200 PUVA sessions. Four melanomas were found from 1975 to 1990, ten from

1991 to February 1996 and eleven from March 1996 to 1998. The frequency of Fitzpatrick skin type I and II was higher among patients with melanoma ($p < 0.005$). No patients with melanoma had skin types IV or higher.

After age and sex adjustment, the incidence of melanoma was more than double among patients given at least 200 PUVA sessions compared to cohort members given lower doses. A higher risk was also found in the cohort 15 years after the first exposure to PUVA. The incidence of melanoma was 6.9 times higher in the cohort from 1991 to 1998 than that from 1975 to 1990.

These findings should be considered in the risk-benefit analysis of PUVA treatment.

Epidemiology and control of leprosy in Hong Kong

Ho CK, Chong LY, Ng PS.

S Chin J Dermato-venereol 2001;8(1):49-50.

The incidence of leprosy in Hong Kong declined from 320 new cases in 1954 to 20-30 new cases in the 1990's (prevalence: 0.6 per 100,000 population in 1999) following improved housing, better health of the population and enhanced treatment. The subtypes consisted of 45% tuberculoid, 30% lepromatous and 25% borderline. Most new cases were between 20 and 50 years of age. The male-to-female ratio was 2:1. Ninety percent of new cases were Chinese in the 1970's and this decreased to 50% in the 1990's. From 1970 to 1999, 22% of patients had WHO Grade 2 limb deformities (claw hand, foot drop).

The introduction of WHO multi-drug therapy (WHO-MDT) in 1983 was well accepted by our patients. The incidence of deformities was also reduced. Management therefore changed from in-patient treatment with dapsone monotherapy in a leprosarium to out-patient treatment with WHO-MDT. Lepa reactions occurred in 12% of patients on dapsone monotherapy and 11.1% on WHO-MDT.

However, relapses were reported after stopping WHO-MDT (11 out of 645 patients), highlighting the need of long-term surveillance. Furthermore, leprosy was still a stigma in Hong Kong and further public education was necessary. Since some patients emigrated before completion of treatment, better communication with the medical authorities in other regions was also important.

Imiquimod 5% cream in the treatment of superficial basal cell carcinoma: results of a multicenter 6-week dose-response trial

Marks R, Gebauer K, Shumack S, et al.
J Am Acad Dermatol 2001;44:807-13.

A multi-centre, open-label, randomized study using topical 5% imiquimod cream in the treatment of primary superficial basal cell carcinoma (BCC) was undertaken.

Ninety-nine white patients (72 men, 27 women) with biopsy-proven superficial BCC were enrolled after obtaining their informed consent. Their mean age was 61 years (range, 23-83 years). They were randomized to one of the four dosing regimens for six weeks: twice daily (3 patients), once daily (33 patients), twice daily three times/week (30 patients), once daily three times/week (33 patients). Because of the frequent occurrence of severe local reactions in the twice-daily regimen in another study, only three patients were recruited into this arm. Six weeks after completion of imiquimod treatment, the tumor site was excised for histological examination. Adverse events and local skin reactions were closely monitored.

Complete histologic clearance was noted in 100% (3/3) of the twice-daily group, 87.9% (29/33) of the once-daily group, 73.3% (22/30) of the twice-daily three times/week group, and 69.7% (23/33) of the once-daily three times/week group. Local inflammatory skin reactions increased with the dosing frequency but were well tolerated.

Five percent imiquimod cream was a promising option in treating superficial BCC and further long-term studies were warranted.

SDZ ASM 981: An emerging safe and effective treatment for atopic dermatitis

Luger T, Van Leent EJM, Graeber M, et al.
Br J Dermatol 2001;144:788-94.

SDZ ASM 981 can selectively inhibit the *in vitro* production of pro-inflammatory cytokines from T cells and mast cells. The effectiveness and safety of four concentrations of SDZ ASM 981 cream (0.05%, 0.2%, 0.6% and 1.0%) in the treatment of atopic dermatitis were investigated in a multi-centre, randomized, double-blind study.

Two hundred and sixty patients with at least moderate severity of atopic eczema were randomly

assigned to a three-week treatment course with 0.1% betamethasone-17-valerate cream (BMV), one of the four concentrations of SDZ ASM 981 cream, or a vehicle cream. The response was assessed by an adapted Eczema Area Severity Index (EASI) and a pruritus score.

A dose-response relationship was showed for SDZ ASM 981. 0.2%, 0.6% and 1.0% SDZ ASM 981 creams were all significantly more effective than vehicle. The 1.0% cream gave the best response but was less effective than BMV. Nevertheless, the therapeutic effect of SDZ ASM 981 could be enhanced with a longer treatment period as its therapeutic plateau had not been reached in the three-week trial. Local reactions like burning were more frequent in the 1.0% and 0.6% SDZ ASM 981 group than the vehicle group. No drug-related systemic adverse events were reported.

The author concluded that 1.0% SDZ ASM 981 cream was the most effective concentration in terms of pruritus resolution, EASI reduction and patient tolerance.

The severity of cutaneous and oral pemphigus is related to desmoglein 1 and 3 antibody levels

Harman KE, Seed PT, Gratian MJ, Bhogal BS, Challacombe SJ, Black MM.
Br J Dermatol 2001;144:775-80.

Antibodies to the desmosomal proteins desmoglein 3 (Dsg3) and desmoglein 1 (Dsg1) were found in patients with pemphigus vulgaris (PV) and foliaceus (PF) respectively. This study correlated the levels of IgG autoantibodies to Dsg1 and Dsg3 as measured by enzyme linked immunosorbent assays (ELISA) with the severity of oral and cutaneous disease in PV and PF.

Four hundred and twenty-four serum samples from 80 PV patients and 24 PF patients were included. There was a positive relationship between oral disease severity and Dsg3 ELISA value. A ten-unit increase in the Dsg3 level was correlated with a 25% possibility of a greater oral severity score. No consistent relationship existed between oral severity score and Dsg1 level. For skin disease, a ten-unit increase in Dsg1 level was correlated with a 34% possibility of having a greater severity score. There was again no consistent relationship between skin disease severity and Dsg3 ELISA values.

This study showed that skin disease severity was associated with Dsg1 levels while oral severity with Dsg3 levels in pemphigus, regardless of PV/PF subtype.

Bone marrow involvement in cutaneous mastocytosis

Fearfield LA, Francis N, Henry K, Costello C, Bunker CB.

Br J Dermatol 2001;144:561-66.

Mastocytosis refers to a group of disorders characterized by the abnormal accumulation of mast cells in the skin and, less commonly, in other organs. Occult bone marrow involvement was reported in no more than 60% of adult cutaneous mastocytosis patient. This study examined the frequency of occult bone marrow involvement and bone marrow cytogenetic abnormalities in adult cutaneous mastocytosis.

Thirteen adult patients (eight women and five men) with cutaneous mastocytosis were reviewed retrospectively. All but one of these patients had skin biopsy done to confirm the diagnosis. None had systemic symptoms. Bone marrow aspirate was performed in all 13 patients while trephine biopsy in 12. Increased mast cells were found in both aspirate and trephine biopsy in eight patients. Two patients had normal aspirate but increased mast cells in the trephine. One had a normal trephine but increased mast cells in the aspirate. One patient had aspirate done only and it showed increased mast cells. Both aspirate and trephine biopsy were normal in one patient. Six patients had cytogenetic analysis of bone marrow cells and all had a normal karyotype.

Increased mast cells in the bone marrow were demonstrated in all but one patient in this study. The authors concluded that occult bone marrow involvement was frequent in adult cutaneous mastocytosis.

Prevalence and nature of nail alterations in pediatric patients

Iglesias A, Tamayo L, Sosa-de-Martinez C, Duran-Mckinster C, Orozco-Covarrubias L, Ruiz-Maldonado R.

Ped Dermatol 2001;18:107-9.

Besides cosmetically important, nail changes might provide diagnostic clues for associated or previous systemic diseases and might have prognostic importance. This study examined the frequency and nature of nail alterations in children attending a tertiary pediatric hospital.

One hundred pediatric patients aged from birth to 17-year-old were reviewed retrospectively, including five infants, 19 preschool children, 38 school children, and 38 adolescents. Fifty-four patients had toenail involvement, 25 had fingernail involvement and 21

patients had both. Nine children had alterations of one nail only, 51 had two to five nails, 18 had six to 10 nails, one had 11-19 nails and 21 had all 20 nails involved. Fifty-nine patients had nail changes as a presenting complaint not associated with other pathologies. The commonest cause was onychomycosis, followed by onychocryptosis and paronychia. Nail alterations with genodermatosis were found in 23 patients. The commonest disease was dystrophic epidermolysis bullosa, followed by focal dermal hypoplasia and pachyonychia congenita. Nail alterations associated with dermatosis were found in 16 patients, with viral wart as the commonest cause, followed by alopecia areata and lichen planus.

The author concluded that nail alterations were prevalent in the pediatric dermatology patients, some of which were of diagnostic value.

Intralesional injection of mumps or *Candida* skin test antigens – a novel immunotherapy for warts

Johnson SM, Roberson PK, Horn TD.

Arch Dermatol 2001;137:451-5.

This study aimed to determine whether intralesional injection of mumps and *Candida* antigens into warts of immune individuals could (1) clear the treated wart, and (2) result in systemic immunity against the human papillomavirus that will clear untreated warts at distant sites.

Recruited subjects (n=115) were first tested for skin reaction towards mumps and *Candida* antigens. Responders were randomized to receive cryotherapy (n=26) or immunotherapy (n=55). Nonresponders (n=34) were offered cryotherapy. In the cryotherapy arm, all warts were treated for two 30-second cycles at each session. In the immunotherapy arm, only the largest wart was treated if multiple warts were present. Treatment was repeated every three weeks until clearance or for a maximum of three treatments. Twenty-nine (74%) of the 39 patients who completed the protocol for immunotherapy had complete clearance of the treated wart. On an intent-to-treat basis, there was no statistical difference between cryotherapy and immunotherapy. Among the 18 subjects with multiple warts receiving immunotherapy, 14 had clearing of all warts. Transient flu-like illness occurred in six patients undergoing immunotherapy.

The authors suggested that immunotherapy should be used as first-line treatment for immune individuals with numerous or large warts, and for patients who have failed cryotherapy.

Comparative efficacy of treatments of pediculosis capitis infestations – update 2000

Meiking TL, Entzel P, Villar ME, Vicaria M, Lemard GA, Porcelain SL.

Arch Dermatol 2001;137:287-92.

This study was undertaken to assess the change in efficacy of four products for head lice since early 1980s because of changes in formulation, and to determine the baseline efficacy of an over-the-counter product NIX (1% permethrin).

Lice and nits were obtained from infested subjects in Panama. For pediculicidal activity, Ovide (0.5% malathion) was acting fastest, killing all lice at 10 minutes. A-200 (synergized natural pyrethrins) killed 97% of lice at 20 minutes while diluted NIX (0.1% permethrin) killed 83% at 30 minutes. RID (synergized natural pyrethrins) "killed" 49% at 10 minutes and 53% at three hours, with a transient "resurrection effect" noted in treated lice. One percent lindane shampoo was the slowest acting, killing 61% of lice at three hours. RID was the only product showing a sharp decrease in pediculicidal activity from 1986. According to the percentage of nits hatched, Ovide had the highest ovicidal activity (0%), followed by A-200 (17%), diluted NIX (19%), RID (31%) and lindane (76%). Compared with 1986 data, only lindane showed a significant drop in ovicidal activity rate from 70% to 24%.

The study showed that Ovide (0.5% malathion) was the most effective treatment for pediculosis capitis, and lindane the least effective.

The impact of psoriasis on quality of life

Krueger G, Koo J, Lebwohl M, Menter A, Stern RS, Rolstad T.

Arch Dermatol 2001;137:280-4.

A survey was undertaken among the members of the National Psoriasis Foundation in the United States in 1998 to assess the psychosocial impact of psoriasis and the patients' perspectives on therapeutic options and their satisfaction with treatment. A questionnaire was mailed to 40,350 members, with a response rate of 43%. Furthermore, 502 respondents with severe psoriasis were interviewed by telephone.

Younger patients (<55 years old) reported a greater psychosocial impact of psoriasis (interacting in workplace, with family/spouse, making/keeping friends, excluded from a public facility, getting a job, contemplated suicide). For activities of daily living, younger patients reported more difficulties in sexual

activities, while older patients had more difficulties in activities like using their hands or walking. Among the telephone survey respondents, 48% were very or fairly satisfied with their treatment; 49% were only somewhat or not at all satisfied. Nevertheless, 78% was frustrated because their treatment did not give good enough result.

The authors concluded that patients with psoriasis perceived that the disease had a profound psychosocial and physical impact. Many patients were frustrated with their treatment. Better doctor-patient communication and more aggressive treatment may be desirable.

Phase 2 and 3 clinical trial of oral Bexarotene (Tagretin capsules) for the treatment of refractory or persistent early-stage cutaneous T-cell lymphoma

Duvic M, Martin AG, Kim Y, et al.

Arch Dermatol 2001;137:581-93.

Bexarotene (the first retinoid X receptor-selective retinoid) was studied in a multicenter, open-label, historically controlled, phase 2 and 3 trial including 58 patients with stage I to IIA mycosis fungoides which were refractory or persistent despite treatment with at least two modalities.

Improvement of more than 50% was seen in three (20%) of the 15 subjects with a starting dose of 6.5 mg/m²/day, 15 (54%) of 28 subjects with a starting dose of 300 mg/m²/day, and 19 (67%) of 15 subjects with starting doses above 300 mg/m²/day.

Fifty-seven (98%) of the study subjects had one or more adverse events with dose-limiting toxic effects in 41 (71%). Hyperlipidemia occurred in 46 (79%) with three patients developing pancreatitis due to hypertriglyceridemia, headache in 27 (47%), hypothyroidism in 23 (40%), asthenia in 21 (36%), leukopenia in 16 (28%), pruritus in 15 (26%) and elevated liver enzymes in 6 (10%).

The authors concluded that bexarotene was an effective drug for the treatment of refractory or persistent stage I to IIA mycosis fungoides with favorable patient tolerability and manageable side effects.