CASE REPORT

Acquired Ichthyosis due to Hodgkin's Lymphoma

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Introduction :

The Ichthyoses are a group of hereditary disorder characterized by an excess accumulation of cutaneous scale, whose severity varies from asymptomatic and mild to life threatening[1].
Four most common and important types are the following[1] :
i) Dominant ichthyosis vulgaris (DIV) [autosomal dominant]
ii) X-Linked Ichthyosis (XLI) [X-linked recessive]
iii) Lamellar ichthyosis (L1) [autosomal recessive]
iv) Epidermolytic hyperkeratosis (EH) [autosomal dominant]
Acquired ichthyosis develop in patients with Hodgkin's disease, mycosis fungoides, multiple myeloma, carcinomatosis, hypothyroidism, sarcoidosis, leprosy, nutritional deficiency, AIDS, lupus erythematosus, dermatomyositis, secondary to multiple drugs including (i) nicotinic acid, (ii) triparanol, (iii) butyrophenones[2].
In most of the cases the epidermis proliferate normally but keratin is retained with a resultant thickened stratum corneum. Dehydration of stratum corneum is almost common[1-6].

Case report :

A 75 year old male patient was admitted in the ENT department of Holy Family Red Crescent Medical College Hospital with left sided cervical lymphadenopathy. Department of ENT referred the patient to the Department of Dermatology to give an opinion for intensive skin lesion. In foot region xerosis (dry skin) with fine powdery scaling of fish scale pattern was observed (Fig: 1). In both leg regions hyperkeratotic follicular papules were found and the extensor surface of the right lower extremity showed hyperkeratotic follicular papules (Fig: 2). Biopsy was done from the left cervical lymph node (Fig: 3). Histopathological study of biopsied tissue showed lymphocytes mixed with heterogeneous population of cells consisting of plasma reticulum cells, neutrophils and few eosinophils. There were also large mononuclear cells with prominent nucleoli as well as few binucleated cells showing features of Reed-Sternberg cells, which is compatible with Hodgkin's disease (Figs: 4 and 5).

Laboratory investigations were within normal limit except the hemoglobin level was 60%, ESR 85 mm in first hour and blood urea was 9.74 mmol.

Ultrasonogram did not show any abnormality in abdominal organs except benign enlargement of the prostate. Three weeks after the treatment by one cycle of chemotherapy for Hodgkin's lymphoma, and topical cream and ointment for the ichthyosis, the skin lesion became clear (Figs: 6 and 7).

Discussion :

Treatment is highly beneficial if accompanying malignancy responds to anti-cancer therapy. Two forms of the disease are seen. Type I is found in Blacks and Asians, is nonfamilial and may be associated with systemic diseases or malignancies. Type II disease occurs in white patients as hypopigmented lesions, is often familial and is usually not associated with internal disease2. This presented case is very similar to type I form.
Hodgkin's disease is the most common malignancy reported with acquired ichthyosis.
Hodgkin's disease was managed by chemotherapy which included injection Vinblastin (intravenous with dilution) 8 mg, injection Adrosol (Adriamycin) 30mg, injection Bleocin (Bleomycin) 10 mg and injection DTIC 200mg. This regimen was given for one cycle. Simultaneously, topical therapy for ichthyosis like 10% urea

Fig: 1 Right Foot: Xerosis (dry skin with fine powdery scaling. Fish scale pattern.

Fig: 2 Right Leg: Hyperkeratotic follicular papules on extensor surface of the right lower extremity.

Fig: 3 Left side of the neck: Skin after biopsy from left cervical lymph node (before the stitch was removed).

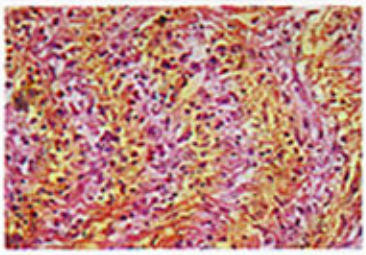

Fig: 4 Histopathological section of biopsied tissue (lX100) showing lymphocytes mixed with heterogeneous population of cells.

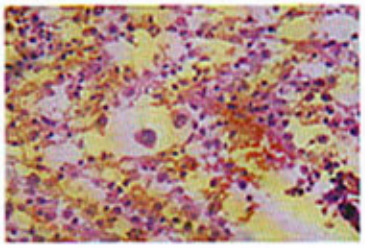

Fig: 5 Histopathological section of biopsied tissue (1X 400) showing Reed-Sternberg cell.

Fig: 6 Left side of the neck: Skin after cervical lymph node biopsy and removal of stitches.

Fig: 7 Extensor surface of both legs: Skin lesion became clear after the treatment.

containing cream, which hydrates the stratum corneum, and Keratolytic agent (5% salicylic acid) was given.
After one cycle of chemotherapy and three weeks of topical treatment the skin lesion became clear. In ichthyosis with an identified systemic disorder, both the condition should be treated together.

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