Photoinduced sarcoidosis mimicking lepromatous leprosy

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Introduction

Sarcoidosis is a systemic non caseating granulomatous disorder of unknown origin. Cutaneous lesions are specific or non specific. Specific lesions contain granulomata and include maculopapules, nodules, plaques, subcutaneous nodules, infiltrative scars, and lupus pernio.

Non specific lesions are reactive processes. Erythema nodosum is considered as the hallmark of non specific lesions.

Uncommon presentations of sarcoidosis are photoinducd papules, ulcerative, hypopigmented, faintly erythematous, verrucous, ichthyosiform lesions etc. Photoinduced sarcoidosis is very rare and only a few cases have been reported in the literature. Because lesions can exhibit many different morphologies, cutaneous sarcoidosis is known as one of the great 'imitators' in dermatology.

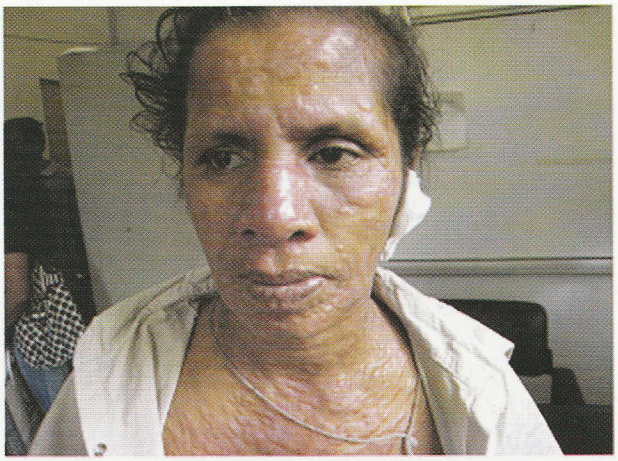
History

A 45-year old female presented with multiple erythematous and skin coloured papules and plaques on sun exposed skin since 2002. Lesions were itchy and associated with hair loss and joint pains. As lesions were progressive, she had sought treatment from a dermatology unit in 2004. Biopsy had favored tuberculoid leprosy and she had been given MB treatment from February 2005 to February 2006. Despite MB treatment, lesions continued to worsen, and she presented to us in February 2008 with multiple erythematous papules and plaques on sun exposed areas of face, arms and 'v' area of neck. Lesions were photosensitive and associated with hair loss and joint pains. She had no numbness of hands or feet.

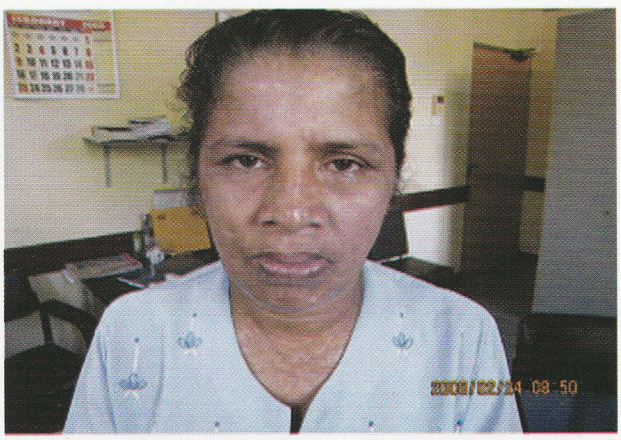
There was no contact history of leprosy. She had long standing uncomplicated diabetes and was on oral hypoglycemic treatment.

Examination

There were multiple non scaly, erythematous and skin coloured papules and plaques on face, arms, upper chest, upper back and scalp. These were prominent on sun exposed skin. There was infiltration of ears, nose and lips. Sensory testing was negative on plaques. Scalp showed diffuse thinning of hair. There was discrete 1cm x 1cm bilateral cervical lymphadenopathy. She did not have a malar rash. Other systems were normal.



Before treatment



After treatment

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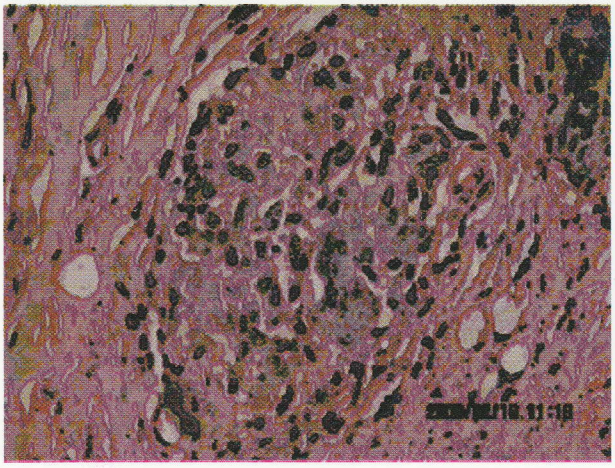
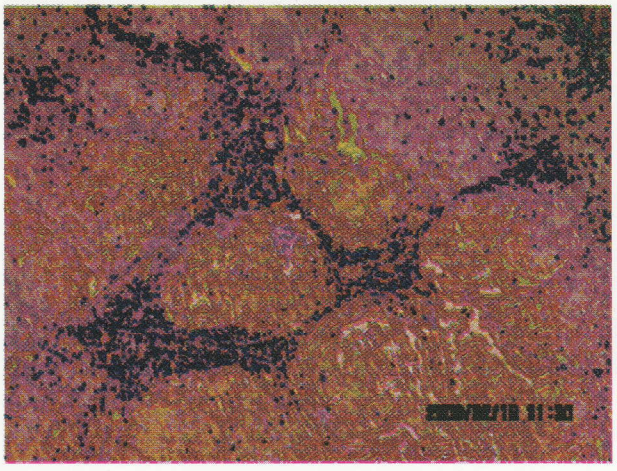
Investigations

Skin biopsy in 2004 had revealed several granulomatous foci with epithelioid histiocytes, few giant cells and lymphocytes. Some granulomata were arranged around appendages. Nerve involvement was not seen. This biopsy favoured tuberculoid leprosy.

Skin biopsy done at Teaching Hospital, Ragama in 2008 showed atrophic epidermis at the centre of the biopsy. Dermis revealed multiple granulomata composed of epithelial histiocytes, multinucleated giant cells and very scanty lymphocytes favouring sarcoidosis. Similar changes were seen in cervical lymph node biopsy. Ear lobe smear was negative for leprosy bacilli. Chest x-ray was normal. Mantoux test and ANA were negative. Angiotensin converting enzyme (ACE) activity was normal. ESR was 20mm/1st hour and FBS was 135 mg/dl .Ultra sound scan of the abdomen revealed multiple calculi in in the right kidney. FBC was normal.



Skin biopsy – non caseating granuloma



Lymph node biopsy

Treatment

She responded to oral prednisolone within 6 months leaving only post inflammatory hypopigmentation. She is in remission for the last 5 months and is being followed up for recurrence and systemic manifestations.

Discussion

Sarcoidosis, well known for its variable cutaneous presentations. It can mimic various dermatological conditions.

This female presented to us with photosensitive plaques on sun exposed skin. We considered following as differential diagnoses; polymorphous light eruption (PMLE), (DLE), lepromatous leprosy, photo induced sarcoidosis, actinic granuloma and chronic plaque psoriasis.

It is unusual for PMLE to continue for years. DLE was excluded on histology. Though she had infiltrated lesions on the face and ear lobes, presence of photosensitivity made leprosy unlikely. In view of skin type IV actinic granuloma was excluded. Finally, photoinduced sarcoidosis was considered.

Skin biopsy and lymphnode biopsy showed non caseating granulomata consistent with sarcoidosis. Ear lobe smear was negative for leprosy bacilli.There was no degeneration of elastic fibers on special stains. However there was no evidence of systemic sarcoidosis.

She was treated with prednisolone 40 mg /day which was tapered as skin lesions improved. Lesions resolved completely leaving post inflammatory hypopigmentation.

We report this case as photo induced sarcoidosis is a rare condition and only a few cases have been reported in the literature. This case also highlights an atypical presentation of cutaneous sarcoidosis which has masqueraded as a common dermatological condition.

References

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