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Clinical Image

An Expatriate from Saudi Arabia with Papulo-nodular Rash and Blisters for Two Years

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Abstract:

Bangladesh is non endemic for Cutaneous Leishmaniasis (CL). Rarely, we come across such cases in workers returning from Middle east particularly Saudi Arabia. Recently we found and managed a case of cutaneous leishmaniasis in a 37 year old male returning from Saudi Arabia with a lesion behind his left ankle joint. Although Sodium Stibogluconate is the first choice of drug to treat CL, it is not available in Bangladesh. He was managed successfully with Liposomal Amphotericin B. High index of suspicion is needed to diagnose such case without any delay.

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A 37-year-old normotensive, nondiabetic male hailing from Chadpur, Bangladesh was admitted to our department with multiple papulonodular lesions and blisters of variable sizes and shapes with greyish yellow crusting behind the ankle joint for two years (Figure-1).The lesions were progressive in nature and associated with serous discharge and swelling of left ankle joint. He lost eight kg weight in the last three months and had a history of chicken pox 45 days back. He did not complain of fever, itching, pigmentation, same type of lesion in other parts of body. He was residing in Saudi Arabia for 10 years, where he used to work as a construction worker. He lived in an apartment along with eight of his colleagues. He noticed these lesions while living there. Then he went to local physician who treated him with oral and topical medications (antifungal and antibiotic). He went for follow up multiple times but there was no improvement rather the lesions progressively worsened. Thereafter his physician arranged a biopsy, and his histopathology was suggestive of cutaneous leishmaniasis. For further evaluation he came back to Bangladesh and got admitted to our department for better management. Upon arrival we took meticulous history and did thorough clinical examination. On query he gave history of sand fly bite several times. On local examination, there are multiple papulonodular lesions behind his left ankle joint, some coalescing creating an irregular margin. There are patches of hyperpigmentation, erythematous areas with scaly crusts and slight discharge of serous fluid on gentle pressure. Other systemic examination revealed no abnormality. Baseline laboratory parameters are showed in Table-1 which were within normal parameters. His histopathology report was suggestive of Cutaneous Leishmaniasis (CL) showing mild hyperkeratotic epidermis with irregular acanthosis. The dermis showed diffuse infiltration of lymphocytes, histiocytes, plasma cells and intracellular and extracellular LD bodies. Fite faraco stain is negative for lepra bacilli. PAS stain section was negative for fungus. Although sodium stibogluconate is the first choice of drug to treat CL, it is not available in Bangladesh. We managed him with Liposomal Amphotericin B 20mg/kg in three divided doses based on our previous experience.[1] After first dose, patient developed renal impairment and we reduced the dose accordingly. Two weeks after the first dose his lesions significantly improved and was discharged thereafter. He is stable to this date with no complications. We have plan for repeat histopathology after 3 months.

Cutaneous leishmaniasis refers to localized involvement of skin rather than diffuse or disseminated forms. The etiological agents mostly *L. tropica*, *L. major*, *L. ethiopica* and also *L. infantum* and *L. donovani*.[2] Previous report from an expatriate (Saudi Arabia) of Bangladesh confirmed L. major as the offending agent.[3] In South Asia Visceral

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leishmaniasis is more common than cutaneous leishmaniasis.[4] Although Bangladesh is non endemic for cutaneous leishmania, cases can be found in migrants.[5] Therefore, chronic skin lesion from a Middle East returner should undergo histopathology examination to exclude CL. Our national case management guideline warrants immediate update adding treatment options available in the program.

Table-1: *Laboratory profile of the patient*

Test	Before LAMB	After LAMB	After LAMB dose reduction	Normal range (unit)
Hemoglobin	14.4	14.6		13-17 (g/dl)
Total WBC count	8000	7000		4000-11000 cu mm
Neutrophil	40%	69%		40-80 %
Lymphocyte	38%	19%		20-40 %
S. creatinine	0.98	1.79	1.21	0.75- 1.35 mg/dl
SGPT	60	40		Upto 45 U/L
RBS	5.73			<7.8 mmol/L
Sodium	141	135	142	135-145 mmol/L
Potassium	4.1	3.3	3.92	3.5-4.5 mmol/L

Figure 1 *Showing lesion before (A & B) and 14 days after (C & D) liposomal amphotericin B therapy*

Conflicts of interest:
Authors declare no conflicts of interest.

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