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CASE REPORT

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Dermatology Photo Quiz 3

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Abstract

Leprosy has been prevalent in India for a very long time. To control the prevalence rate (PR) of leprosy in India, Government of India (GOI) launched "National Leprosy Control Programme (NLCP)" with Dapsone monotherapy in 1955. The PR in 1983 was 57/10000 population. In 1983 GOI launched "National Leprosy Eradication Programme (NLEP)" with "Multi Drug Treatment (MDT)". PR came down to <1/10000 population in 2005. World Health Organization (WHO) declared leprosy was eliminated from India in 2005. Clinicians all over India are diagnosing leprosy cases and treating them. Multi Bacillary (MB) and Pauci Bacillary (PB) cases are commonly detected. Detection of new cases reminds us that transmission of leprosy is still active in the community. We are reporting a case of leprosy.

Keywords: GOI; NLCP; NLEP; MDT; WHO; MB; PB

Patient history & clinical examination

21-year-old male came with h/o light colored skin lesion over the left side of face since 8 months.

8 months back his friends observed a light colored patch of 2X2 cm on his left cheek. He noticed the lesion in the mirror. As the lesion was asymptomatic he neglected the lesion. Lesion started growing in size and progressed to present size over 8 months. The lesion extends all over the left side of the face. The lesion is a hypo pigmented patch extending from margin of the mandible extending on to angle of the mouth, left nasolabial fold and extending on to forehead also. Most of the patch is well defined, but the lesion on the forehead is ill defined. Size of the lesion is 13 X 8 cm. 5 finger like projections are extending from the main lesion, size 1 X 1 cm on the forehead. No other lesions on other parts of the body.

Sensory examination of the patch: 1) Fine sensations examined with wisp of cotton. Sensations are diminished. 2) Crude sensations examined with clinician's fingers. 3) Temperature sensation examined with two test tubes containing Luke warm water and cold water. 4) Pain sensation examined with pin. All sensations are diminished.

All peripheral nerve trunks normal to feel. Cutaneous nerves around the lesion not thickened.

Muscles of facial expressions are normal to feel.

21-year-old male with hypo pigmented lesion on left side of face present in the last 8 months. The lesion covers entire left side of the face from margin of the mandible to forehead. Size 13 X 8 cm. Satellite lesions present on forehead. All the modalities of sensations are diminished. Photo courtesy: Dr Sanjay Dangae

What is your diagnosis?

Leprosy: Incidence of leprosy in India is assumed to be dating back to Vedic times. Leprosy can cause deformities, disabilities, disfigurements, disliking among family members and society. Leprosy patients were stigmatized and made to stay away from house and villages. They led a disgraceful and destitute life. As a result of this people were not coming forward for treatment, and were suffering within themselves. The PR in 1955 was 57/10000 population. The GOI launched NLCP, the strategy was 1) Survey (to survey and register all the hidden cases), 2) Education (education of patient, family members, and all villagers about the disease and treatment), and 3) Treatment (treatment of all registered cases with Dapsone monotherapy).[1]

In 1983, NLCP was renamed the National Leprosy Eradication Programme (NLEP), wherein Multi-Drug Therapy (MDT) consisting of dapsone, clofazimine and rifampicin, was initiated as standard treatment for leprosy as recommended by the World Health Organization (WHO)[2] Phase by phase MDT was introduced all over India, drugs were given free of cost in all Government hospitals. Deformity correction and rehabilitation programme helped to improve quality of life in leprosy patients. Continued MDT programme all over India, various programmes conducted by GOI has helped in bringing down "PR by 2005 to less than 1/10000 population".[3]

WHO and GOI declared "Leprosy is eliminated from India" in 2005.[4] But unfortunately even today clinicians are still detecting new cases which may be has to be taken seriously and see if the chain of leprosy transmission is still active

What is MDT: Leprosy has been classified into two groups in view of treating the patients. They are 1) Multi Bacillary case (MB) and 2) Pauci Bacillary case (PB).

Table 1. Grouping of leprosy cases for treatment purpose[5]

	PB case	MB case
Skin lesions	Count the lesions, lesions should be less than 5	Count the lesions, lesions should be 6 and above
Peripheral nerves	No nerve involved OR Only one nerve involved	More than one nerve involved
Skin slit smear	Negative at all sites	Positive at any sites

Table 2. Multi Drug Regimen Treatment particulars[6]

MB case	1) Rifampicin 600 mg, once a month, supervised dose. 2) Dapsone 100 mg daily, self-administered. 3) Clofazimine 300 mg once a month, supervised dose, 50 mg daily.	Duration of treatment is 12 months. 12 doses should be completed in 18 months. In between 2 doses, there should not be gap of more than 3 months.
PB case	1) Rifampicin 600 mg, once a month, supervised dose 2) Dapsone 100 mg daily, self-administered	Duration of treatment is 6 months. 6 doses should be completed in 9 months. In between 2 doses, there should not be gap of more than 3 months.

Our patient is having 6 lesions (1 main lesion + 5 smaller lesions). Hence MB dose of MDT is given. All the members of patient's family were examined, no signs of leprosy.

Conclusion

Patient is a 21-year-old male presented with easily visible lesion over the face for 8 months and had not seeked medical consultation. It shows lack of awareness about leprosy. Based

on the scenario here I have to be brought to the notice that Leprosy awareness program should be active and extensive. House to house survey to detect hidden cases and register them for treatment is essential. Clinical surveillance of cases after completion of MDT has an important role in reducing the disease spread. Local opinion makers like politicians, religious leaders, NGOs, and students (NCC & NSS) should be utilized to educate villagers, and encourage them for voluntary reporting.

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