INTRODUCTION
Secondary syphilis presents clinically in a variety of ways and is known as the great mimicker of skin diseases. The distribution of these lesions is generalized and symmetrical in early stages of the infection but becomes asymmetrical with the passage of time thus causing diagnostic difficulty.1 Pathogenesis and host-pathogen interactions in syphilis are complex and poorly understood. Although basic immune mechanisms in pathogenesis of the disease remain largely unknown, cell-mediated immune processes play a prominent role in clinical manifestations of syphilis.2 During secondary syphilis, local and systemic innate and adaptive immune responses are simultaneously elicited and the principal driving force to recruit immune cells is the inflammatory milieu established by spirochetal lipoproteins.3,4

This report describes a case of secondary syphilis with the objective to highlight the unusual presentation of lesions localized to face and soles only and to discuss the possible underlying immunological mechanisms. Although dermatologists occasionally come across patients having localized lesions of secondary syphilis, such cases have never been reported from Pakistan. This case emphasizes the need for increased awareness on the part of physicians to recognize new patterns of presentation in syphilitic infection.

CASE REPORT
A 22 years old unmarried male presented with one-month history of an asymptomatic facial rash for cosmetic concerns. He had used multiple topical applications without any effect. Dermatological examination revealed multiple hyperpigmented macular lesions over lower face on both sides. The lesions showed follicular prominences. The examination also revealed localized hyperpigmented staining of the soles. Cervical lymph nodes on left side were enlarged. The nodes were discrete, mobile and non-tender. Further inquiry revealed a sexual encounter with a prostitute one year back but he denied appearance of genital ulcer or any skin rash other than these facial and plantar lesions, since then. He was investigated; his VDRL was positive in a dilution of 1:128 and TPHA was positive in a dilution of 1: 640. Serology for human immunodeficiency virus was negative. Histopathology of the affected skin from both sites revealed perivascular infiltration by lymphocytes and plasma cells and endarteritis obliterans. Although history was typical and laboratory investigations were confirmatory of secondary syphilis, other conditions like lichen planus and chronic discoid lupus erythematosus were also considered as clinical differential diagnoses. He was treated with intramuscular injections of benzyl penicillin 1 million units 6 hourly for 14 days. The lesions healed almost completely by the end of the treatment period. The patient has been placed under surveillance for regular follow-up.

DISCUSSION
The clinical manifestations in the early period of secondary syphilis are generalized and symmetrical and if untreated, become asymmetrical as the time passes before entering into the latent phase of the infection. This patient presented with localized cutaneous lesions as well as localized lymphadenopathy from the outset and denied appearance of genital ulcer or any skin rash other than these localized lesions during last one year. As the early asymptomatic macular syphilides can be overlooked easily and papular lesions of syphilis may be punctuated by spells of apparent latency,5 it is not
possible to say with certainty that the lesions presented by the patient were the initial manifestations of secondary syphilis. Although isolated syphilitic lesions in immunocompetent adults have been reported previously as well, this presentation of secondary syphilis is extremely rare.

In primary syphilis, the poorly understood immunological mechanisms are rapidly stimulated to eradicate the organism and then quickly down regulated to avoid inadvertent damage to the host tissues. Most of the organisms are eradicated but a few persist. In order to multiply and spread, the remaining organisms have to have an access to vasculature. In the process, *Treponema pallidum* activates vascular endothelial cells, which in turn secrete a large variety of inflammatory cells including leukocyte adhesion molecules. Leukocyte adhesion molecules play a pivotal role in initiation of the inflammatory processes by recruiting leukocytes to the sites of inflammation. Various studies suggest that a T lymphocytes helper 1 (Th 1) response is very important in eradication of the organism. These cytokines are elicited in primary syphilis and progression to the secondary stage is accompanied by a shift to a T lymphocytes helper 2 (Th 2) response, allowing for incomplete clearance of the pathogen. In the meantime a transient macrophage suppressive activity also takes place. This specific suppression without inducing generalized immunosuppression, involves Prostaglandin E2. As the time passes, ability of Th2 lymphocytes to cytokines secretion increases and that of Th1 lymphocytes decreases, thus facilitating multiplication of the organism and progression of the disease. However, such a progression of the immunological events is yet to be confirmed and pathogenetic mechanisms remain largely speculative.

Localized lesions in this patient were either the initial manifestations of the disease or the patient might have overlooked the initial lesions. In either case, the presentation is rare and probably switch over between Th 1 and Th 2 cytokines could not take place as proposed in literature and specific immunity remained reasonably well in this patient, not allowing the syphilitic eruption and lymphadenopathy to be generalized.

Clinically, secondary syphilis may present in unusual and unexpected ways. Therefore, early recognition of syphilis is important for the start of treatment and recovery of patients to avoid crippling or killing manifestations at later stages and the prevention of spread of this infectious disease. There is a need for increased awareness on the part of physicians to recognize new patterns of syphilitic infection, together with a willingness to consider the diagnosis of syphilis in patients with unusual clinical features.

REFERENCES


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