BİLİMSEL MEKTUP SCIENTIFIC LETTER

DOI: 10.5336/dermato.2021-87455

Isolated Palmar Rash as the Presentation of Secondary Syphilis: Syphilis Continues to Fascinate Physicians

İkincil Frengi Sunumu Olarak İzole Palmar Döküntü: Frengi Doktorları Büyülemeye Devam Ediyor

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ABSTRACT Syphilis is considered one of the greatest imitators which can mimic any skin disease. Keen examination together with a sound brain and a high degree of suspicion is required for its diagnosis. Syphilis, a sexually transmitted disease caused by spirochete *Treponema pallidum pallidum,* was more common during Second World War. Later, as the human immunodeficiency virus cases increased there was increased incidence of all sexually transmitted diseases including syphilis as they facilitate transmission of each other. Syphilis manifests with cutaneous as well as systemic features and is divided into several stages (primary, secondary, latent, and tertiary), with different signs and symptoms associated with each stage. In this article, we report an unusual case of secondary syphilis from Saudi Arabia manifesting with palmar rash without any systemic manifestations.

Keywords: Erythematous papules and plaques; palmar rash; secondary syphilis; syphilis; *Treponema pallidum*

ÖZET Frengi, herhangi bir cilt hastalığını taklit edebilen en büyük taklitçilerden biri olarak kabul edilir. Teşhisi için sağlam bir beyin ile birlikte keskin bir muayene ve yüksek derecede şüphe gereklidir. Spirochete *Treponema pallidum pallidum*'un neden olduğu cinsel yolla bulaşan bir hastalık olan frengi, İkinci Dünya Savaşı sırasında daha yaygındı. Daha sonra insan immün yetmezlik virüsü olguları arttıkça, sifiliz de dâhil olmak üzere tüm cinsel yolla bulaşan bir hastalıkların insidansı, birbirlerinin bulaşmasını kolaylaştırdığı için arttı. Frengi, sistemik olduğu kadar kutanöz özelliklerle de kendini gösterir; her aşamayla ilişkili farklı belirti ve semptomlarla birkaç aşamaya (birincil, ikincil, gizli ve üçüncül) ayrılır. Bu yazıda, herhangi bir sistemik bulgu olmaksızın, palmar döküntü ile kendini gösteren Suudi Arabistan'dan alışılmadık bir sekonder sifiliz olgusunu sunuyoruz.

Anahtar Kelimeler: Eritematöz papüller ve plaklar; palmar döküntüsü; ikincil frengi; frengi; *Treponema pallidum*

The great imitator syphilis can mimic any skin disease. Keen eyes and sound brain is required for its diagnosis. Syphilis is a sexually transmitted disease (STD) caused by spirochete *Treponema pallidum pallidum*. It was more common during Second World War. Later as the human immunodeficiency virus (HIV) cases increased there was increased incidence of all STD's including syphilis as they facilitate transmission of each other.[1,2] Syphilis has both cutaneous and systemic manifestations and is divided into stages (primary, secondary, latent, and tertiary), with different signs and symptoms associated with each stage. We report an unusual case of asymptomatic secondary syphilis from Saudi Arabia with exclusive palmar rashe without any systemic manifestations.

A 33-year-old male presented to us with asymptomatic scaly red rashe over palms of 2 weeks duration. He was otherwise normal with no other systemic symptoms. On examination he had multiple discrete 2-10 mm erythematous papules and plaques over both palms (Figure 1). Erythematous papules were tender on vertical pressure (Buschke-Ollendorff sign).

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Peer review under responsibility of Turkiye Klinikleri Journal of Dermatology.

Received: 07 Dec 2021 ***Accepted:*** 26 Feb 2022 ***Available online:*** 11 Mar 2022

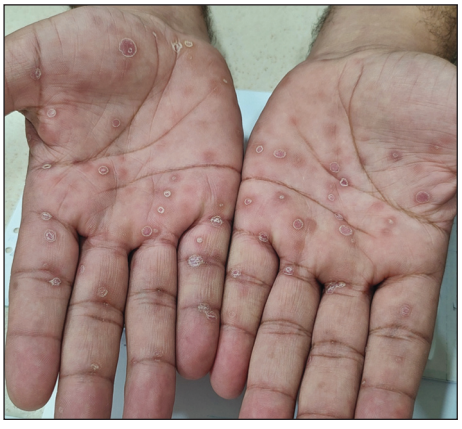

FIGURE 1: Multiple erythematous papules and plaques over palms. Several papules and plaques have a collarette of scales on the outer aspect.

Several papules and plaques were having a collarette of scales surrounding the lesions. On genital examination few psoriasiform patches with peripheral scaling were noted over scrotum without any sign of recent or past genital ulceration. Rest of the cutaneous and mucosal examination was normal with no clinically significant enlarged lymph nodes. Systemic examination was unremarkable. On detailed history and further enquiring about sexual activity, he confessed history of unprotected extra marital sexual contact 2 months ago. However, he denied any history of genital ulceration.

Laboratory investigations were carried out and his venereal disease research laboratory (VDRL) test was reactive in 1:640 dilution (highly positive). *T. pallidum* hemagglutination test was reactive which confirmed syphilis. Other lab tests including enzyme-linked immunosorbent assay for HIV and hepatitis B screening tests were unremarkable. Skin biopsy was not done as the diagnosis was already confirmed by serological tests. The diagnosis of secondary syphilis was made based on history, classical palmar rashe on clinical examination, and confirmed by laboratory investigations. The patient was treated with intragluteal injection of benzathine penicillin 2.4 million IU after test dose. Counselling was done regarding safe sexual practices and partner notification. He has been advised regular follow up to monitor VDRL titres and referred to tertiary care hospital to rule out any systemic involvement.

The differential diagnosis of above case included psoriasis, hand foot mouth disease (HFMD), rocky mounted spotted fever (RMSF) and erythema multiforme (EM). Psoriasis can be differentiated by scaly thick plaques elsewhere over typical areas of psoriasis like elbows, knees, etc with nail pitting. RMSF is characterized by fever, myalgia associated with macular rash on palms and soles which quickly progresses to petechial rashes. While history of fever, flu associated with vesicular rash over palms, soles and mouth is seen in HFMD. EM usually presents with typical target (3 rings) or targetoid (atypical, only 2 rings) lesions with history of preceding herpetic infection or any incriminating drug. In addition the presence of necrotic keratinocytes on histopathology differentiates it easily from syphilis.

Syphilis has symptomatic and asymptomatic stages. Primary syphilis is characterised by painless chancre with lymphadenopathy which develops at the site of inoculation after an incubation period of 9-90 days. It heals in 2-6 weeks with the formation of scar in 10% of cases followed by secondary stage.[1] Secondary syphilis is a generalised infection with various cutaneous manifestations including macular, papulosquamous, papular, lichenoid, follicular lesions, mucous patches, moist papules/condyloma lata involving the intertriginous areas.[3] In about 10%-40% of cases, syphilitic chancres may persist even after the appearance of secondary stage lesions.[4] Tertiary syphilis develops decades after primary infection, characterized by gummas involving skin/bone, cardiovascular, and neurological manifestations.[4]

The present case is presented for its atypical presentation as patient had only palmar rash without any history of genital ulcers and generalised rash which is characteristic of secondary syphilis. Thus, a detailed history and genital examination with necessary screening laboratory tests for syphilis has to be done in all cases of asymptomatic palmoplantar scaly rash. Syphilis is not eradicated yet, and thus all atypical skin manifestations should be screened even with slightest suspicion.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct con-

nection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: *Rafiya Fatima, Tasleem Arif;* ***Design:*** *Rafiya Fatima, Tasleem Arif, Marwa Sami;* ***Control/Supervision:*** *Rafiya Fatima, Tasleem Arif, Marwa Sami;* ***Data Collection and/or Processing:*** *Rafiya Fatima, Tasleem Arif;* ***Analysis and/or Interpretation:*** *Rafiya Fatima, Tasleem Arif, Marwa Sami;* ***Literature Review:*** *Rafiya Fatima, Tasleem Arif, Marwa Sami;* ***Writing the Article:*** *Rafiya Fatima, Tasleem Arif;* ***Critical Review:*** *Tasleem Arif, Marwa Sami;* ***References and Fundings:*** *Rafiya Fatima, Tasleem Arif;* ***Materials:*** *Tasleem Arif, Rafiya Fatima.*

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