thigh (Fig. 1B). A skin biopsy revealed nodular infiltration of polymorphic cells in dermis, but this time the tumor cells were positive for CD20, PAX5, BCL-2, and EBV, but negative for CD3 and CD45RO (Fig. 2D∼F). Three months after diagnosis of EBV-associated DLBCL of the skin, the patient died of respiratory failure caused by severe pneumonia.

To date, only two cases of cutaneous EBV-associated DLBCL in patients with AITL have been reported. In both reports, initial AITL was EBV-positive using special staining[2,3]. Therefore, our case is the first report of cutaneous DLBCL originating from AITL, in which the initial AITL was EBV-negative.

Cases of both subsequent and concurrent developments of DLBCL in AITL have been reported, but only limited to journals of pathology[2-5]. Some of these cases showed absence of EBV infection in biopsy specimen of initial AITL, shedding light on some other possible etiologic factors of secondary lymphoma development[2]. However, despite the absence of EBV-infected B-cells in the initial biopsy specimen of our present case, EBV infection was found by PCR testing of a blood sample. This suggests the importance of testing for EBV infection even when the initial AITL biopsy specimen does not yield EBV positivity.

Our case adds clinical evidence that EBV infection could be the culprit of DLBCL development in AITL patients, and suggests that the detection of EBV infection using PCR on a blood sample can be a more sensitive tool than EBV staining of biopsy specimen.

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https://doi.org/10.5021/ad.2016.28.6.791

Lupus Miliaris Disseminatus Faciei with Extrafacial Involvement

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Dear Editor:

A 25-year-old Korean woman presented with 3 months history of multiple, symmetric, red-brown papules on face (Fig. 1A). Facial erythema, flushing and telangiectasia

Received October 19, 2015, Revised November 18, 2015, Accepted for publication November 20, 2015

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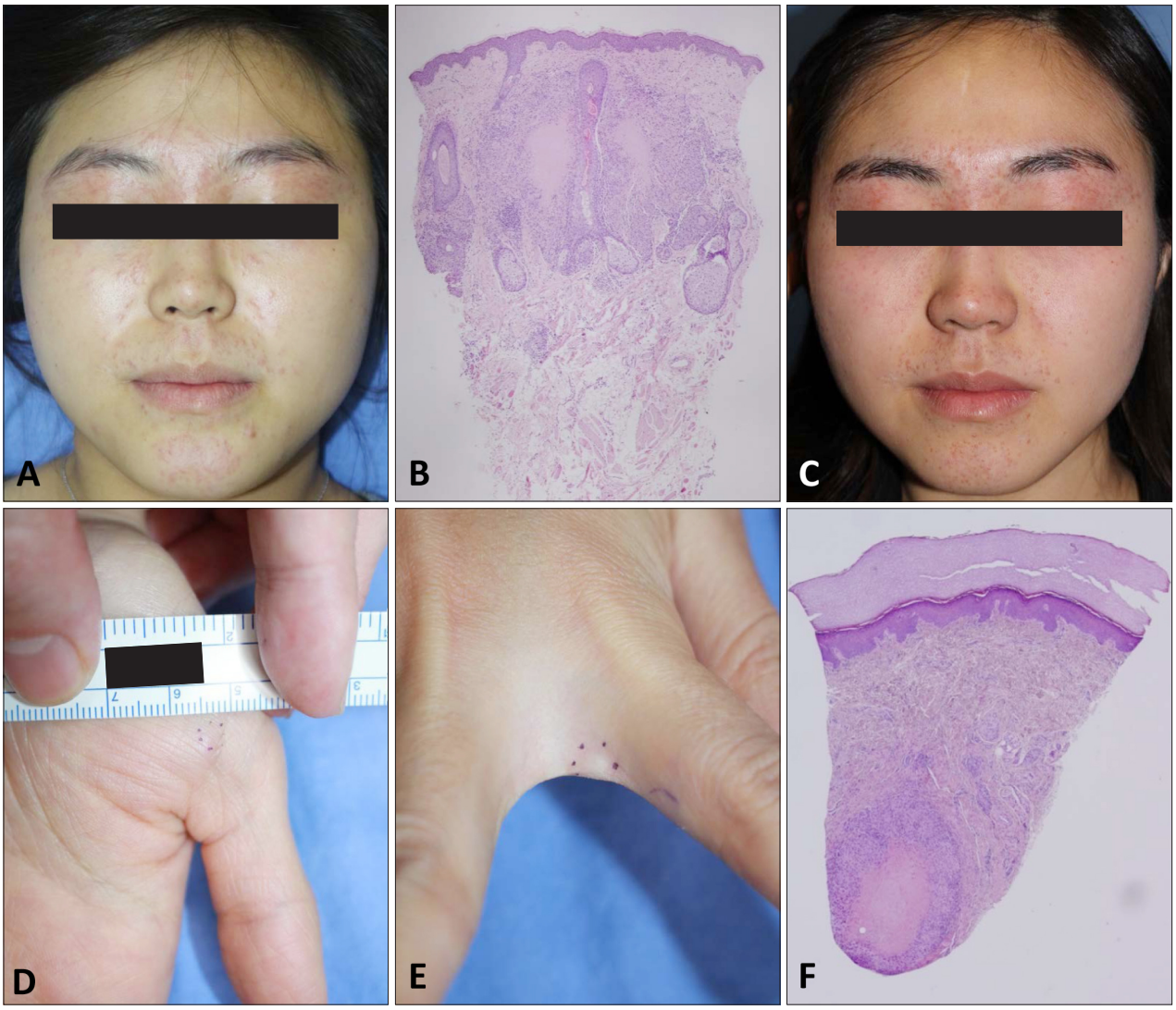

Fig. 1. Clinical images (A, C, D, E) and biopsy specimens (B, F) of the patient. (A) Monomorphous erythematous to brown papules involving the central face at initial visit, (B) biopsy specimen on the chin at initial visit, (C) erythematous macules on her face after cyclosporine treatment, (D, E) firm nodules on palm and the second interdigital web, (F) biopsy specimen of the nodule from interdigital web, (B, F) Histologic images showing tuberculoid granuloma with caseous necrosis surrounded by epithelioid cells (H&E, ×20).

weren't detected. She denied aggravating factors such as alcohol, spicy food intake or any medication. A skin biopsy showed a caseous necrosis surrounded by epithelioid cells (Fig. 1B). She was diagnosed with lupus miliaris disseminates faciei (LMDF). Although patient was treated by minocycline, topical steroid, tacrolimus 0.1% cream, systemic steroid, and doxycycline, LMDF wasn't improve. Finally, it was improved using cyclosporine for 9 months but scars remained (Fig. 1C). One year later, she presented with several skin colored papules on the palms and finger webs (Fig. 1D, E). There was no trauma history. A skin biopsy taken on the index-third finger web showed the same as the previous biopsy (Fig. 1F). Acid-fast bacilli (AFB) stains of specimen and tuberculin skin test were negative. Chest x-ray was normal. We diagnosed as an extrafacial manifestation of LMDF.

LMDF is a rare granulomatous disease presenting dome-shaped red-brown papules on the central face with remarkable preference for the eyelids. LMDF was considered as a variant of lupus vulgaris or a tuberculid because of the histological feature of caseating granuloma. However, LMDF patients didn't showed consistent results of cutaneous hypersensitivity response of tuberculin and PCR techniques demonstrating the DNA of Mycobacteria tuberculosis. LMDF was also considered as a spectrum of sarcoidosis, granulomatous rosacea, and perioral dermatitis. However, in most LMDF cases, histologic features are not consistent with 'naked granuloma', and there is no sign of systemic

Table 1. Summary of case reports showing lupus miliaris disseminates faciei with extrafacial involvement

Case	Reference	Race	Age (yr)/ sex	Facial involve-ment	Extrafacial involvement	Treatment	Scar
1	Kim et al.[2] (2008)	Asian	63/F	N	Neck, chest	Minocycline, doxycycline→NR	Y
2	van de Scheur et al.[1] (2003)	NR	48/F	Y	Ears, neck, hands, legs	Minocycline, clofazimine→NR Sulfasalazine+isotretinoin→CR	Y
3	van de Scheur et al.[1] (2003)	NR	44/M	Y	Nape of the neck, both axillae, Umbilical region, penis, scrotum	Minocycline→NR Prednisolone+dapsone→CR	ND
4	van de Scheur et al.[1] (2003)	NR	26/M	Y	Neck, chest	Sulfasalazine→NR Isotretinoin→CR	Y
5	Hillen et al.[4] (2006)	White	36/F	Y	Axillae	ND	ND
6	Bedlow et al.[3] (1998)	ND	55/F	N	Axillae	Minocycline, flucloxacillin, dapsone→NR Rifampicin, isoniazid→PR	Y
7	Bedlow et al.[3] (1998)	ND	31/F	Y	Axillae, scalp	Flucloxaciline, amoxicillin→NR	Y
8	Farrar et al.[9] (2003)	ND	53/F	Y	Axillae	ND	ND
9	Uchiyama and Tsuboi[7] (2013)	Asian	24/M	Y	Scalp	Prednisolone, minocycline→PR	Y
10～12	Al-Mutairi[5] (2011)	ND	ND	Y	Neck	ND	ND
13～15	Al-Mutairi[5] (2011)	ND	ND	Y	Neck, trunk	ND	ND
16～18	Al-Mutairi[5] (2011)	ND	ND	Y	Scalp	ND	ND
19	Kou et al.[8] (2014)	ND	30/M	N	Trunk, upper extremities	Roxitrhromycin→PR	ND
20	Nath et al.[6] (2011)	ND	36/M	N	Neck, shoulder	Anti-tubercular therapy→NR	ND
21	This case	Asian	25/F	Y	Hands (palms and dorsums)	Minocycline, doxycycline, dapsone, prednisolone→NR cyclosporin→PR	Y

F: female, M: male, N: no, Y: yes, NR: no response, CR: complete response, ND: not documented, PR: partial response.

sarcoidosis. LMDF isn't aggravated by sunlight exposure, alcohol or spicy food intake and doesn't show pustules, telangiectasia and flushing compared to rosacea[1,2]. In addition, it may sometimes resolve spontaneously with scarring or be refractory to rosacea treatment[2]. Furthermore, LMDF shows absences of burning, itching, and relationship with topical steroid compared to perioral dermatitis.

In pathophysiology, some authors suggested an immune response to the pilosebaceous units contributes to LMDF development. However, LMDF occurred on glabrous skin cannot explain this pathogenesis.

LMDF cases with extrafacial involvement were reviewed by a search in PubMed using LMDF & extrafacial, acne agminata & extrafacial, and LMDF & review as search items up to July 2015. Twenty-one cases have been reported and are summarized in Table 1[1-9]. Nine cases weren't recorded in details[5]. It occurred in adults (mean age, 39.25; range 24～63) and sex ratio is 0.71. Four cases in total 21 cases didn't affect face (19%) and 8 cases involved more than two sites. The common sites of extrafacial manifestation are neck (33%), trunk (29%), and axillae (24%). Two cases involving neck showed no facial manifestation. Any cases with extrafacial involvement didn't resolve spontaneously and showed poor response to dapsone, prednisolone, and antibiotics. Seven cases remained scar. In conclusion, LMDF is a distinct disease defined as idiopathic granuloma affecting extrafacial area as well as face after ruling out tuberculosis, rosacea, and sarcoidosis. In addition, LMDF with extrafacial involvement cannot resolve spontaneously and be refractory to treatment.

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https://doi.org/10.5021/ad.2016.28.6.794

A Case of Acrodermatitis Continua Accompanying with Osteolysis and Atrophy of the Distal Phalanx That Evoluted into Generalized Pustular Psoriasis

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Dear Editor:

Acrodermatitis continua is a rare chronic localized pustular and scaly inflammation which is classified as a form of acropustular psoriasis, characterized by sterile, pustular eruptions that initially affect the tips of fingers or less often on the toes[1,2]. Nail destruction can be possible and in late stage it can affect bones resulting in atrophy of the distal phalanx[1-4]. It has been known to have chronic course with localized lesion on the digits[1,2]. Spontaneous improvement have rarely been observed and in some cases, outbreaks of generalized eruptions on the entire body can occur[1,5].

A 51-year-old female visited psoriasis clinic of National Medical Center in December, 2013. She had a long history of pustular psoriasis limited on the fingers and palms for 14 years that eruptively spread to the trunk and extremities for 3 weeks. Patient has been diagnosed with localized pustular psoriasis on the phalanges and palms of both hands at the age of 37. Her compliance with the treatment was not good, nevertheless she never showed psoriasis lesion other than hands.

A review of systems revealed that the patient had mild febrile sensation and generalized myalgia and on physical examination, the patient presented with hyperkeratotic scaly patches with desquamation on the palms and fingers and dystrophic finger nails with deformed finger tips (Fig. 1A). Multiple tiny pustules on erythematous skin could be seen on the trunk and extremities (Fig. 1B, C). Image study showed irregular bony absorption on distal phalangeal tuft (Fig. 2). After 3 weeks of acitretin 20 mg/day, the patient

Received August 25, 2015, Revised November 11, 2015, Accepted for publication November 25, 2015

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