

Clinicopathological characteristics of cutaneous lupus erythematosus patients in Bangladesh

Mohammad Rafiqul Mowla¹, Deva Pratim Barua¹, Shakila Zaman¹, Mohammad Ismail Hossain Chowdhury¹, Shamim Ara², Adam Reich³

¹Department of Dermatology and Venereology, Chittagong Medical College, Chittagong, Bangladesh

²Chittagong International Medical College, Chittagong, Bangladesh

³Department of Dermatology, University of Rzeszow, Rzeszow, Poland

Adv Dermatol Allergol 2022; XXXIX (4): 782–787

DOI: <https://doi.org/10.5114/ada.2021.110254>

Abstract

Introduction: Nearly all epidemiologic studies have involved patients with systemic lupus erythematosus (SLE). Few authors have investigated the characteristics of patients with cutaneous lupus erythematosus (CLE).

Aim: To describe the clinical and pathologic characteristics of a series of patients diagnosed with CLE.

Material and methods: This is a descriptive retrospective cross-sectional study carried out using the consecutive registered records of 218 patients attending the ‘Lupus Clinic’ in Chittagong Medical College Hospital during the period between 2010 and 2020. The activity and damage of CLE were assessed according to the Cutaneous Lupus Erythematosus Disease Area and Severity Index (CLASI).

Results: There were 187 (85.8%) females and 31 (14.2%) males, with the female:male ratio being 6 : 1. The mean age was 30.0 ±11.7 years. The chronic cutaneous lupus erythematosus (CCLE) patients numbered 154 (70.6%), followed by acute cutaneous lupus erythematosus (ACLE) $n = 46$ (21.1%), and subacute cutaneous lupus erythematosus (SCLE) $n = 18$ (8.3%). In LE-specific skin lesions, the most common manifestation was photosensitivity, 198 (90.8%), followed by discoid rash, 155 (71.1%) and maculo-papular lupus rash, 55 (25.2%). Among LE-nonspecific skin lesions, the most common manifestation was non-scarring alopecia, 123 (56.4%), followed by livedo reticularis, 18 (8.3%), Raynaud’s phenomenon, 17 (7.8%), vasculitis, 15 (6.9%), periungual telangiectasia, 7 (3.2%), erythema multiforme, 6 (2.7%) and leg ulcers, 5 (2.3%). Antinuclear antibodies (ANA) were the most common type of autoantibody ($n = 132$, 60.5%) followed by anti-ds DNA ($n = 91$, 41.7%) and anti-phospholipid antibodies ($n = 9$, 4.1%).

Conclusions: CCLE was the most common subtypes of CLE. Photosensitivity was the most common clinical manifestation, whereas ANA were the most frequent autoantibodies of the LE patients of this region. Patients with different subtypes of CLE have distinct clinical and pathological characteristics.

Key words: cutaneous lupus erythematosus, Chittagong, Bangladesh.

Introduction

Cutaneous lupus erythematosus (CLE) is a chronic, relapsing autoimmune condition encompassing a wide range of dermatologic manifestations. Skin involvement in CLE patients can be divided into two categories based on histology: lupus erythematosus (LE)-specific and LE-nonspecific skin lesions. The presence of LE-specific lesions is necessary to confirm the diagnosis of CLE. LE-specific skin lesions are divided into several subtypes based on clinical characteristics: acute CLE (ACLE), subacute CLE (SCLE), and chronic CLE (CCLE) [1, 2]. LE is a complex autoimmune disease with a worldwide distribution and an

unknown etiology [3]. It is characterized by great clinical polymorphism and female predominance [4, 5]. The appearance, progression, and outcome of LE are influenced by genetic, immunological, and environmental factors [6]. Ethnicity also seems to contribute to the expression and heterogeneity of the clinical and immunological features of the disease [7]. However, few studies have investigated the characteristics of patients with CLE. Most studies of patients with LE have focused on patients with systemic lupus erythematosus (SLE), and very few studies have been carried out on the various subtypes of CLE [8–12]. Furthermore, the immune status, individual response to

Address for correspondence: Dr. Mohammad Rafiqul Mowla MBBS, MD, PhD, Associate Professor, Department of Dermatology and Venereology, Chittagong Medical College, Chittagong 4203, Bangladesh, phone: +8801711341405, e-mail: rafiqulmowla66@yahoo.com
Received: 9.07.2021, **accepted:** 21.07.2021.

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disease and type of antibodies vary from person to person, place to place, and population to population.

Aim

In this study, we aim to describe the clinical and pathological characteristics of a series of patients diagnosed with CLE who were treated in a specialized unit of a tertiary care teaching hospital of Chattogram, Bangladesh.

Material and methods

Study design and setting

The present investigation is a descriptive retrospective cross-sectional study carried out using the register records of patients attending the 'Lupus Clinic' in Chittagong Medical College Hospital (CMCH) during the period between 2010 and 2020. CMCH is the oldest tertiary care teaching hospital of the country. The 'Lupus Clinic' of CMCH caters for patients from the Chittagong city as well as from neighboring districts and a multi-disciplinary specialized team is available at the 'Lupus Clinic' of CMCH. The patients' cards were studied and the following clinical data were recorded: demographic characteristics, extent of skin involvement and serological findings. Socio-demographic data included age, sex, completed education, living place (rural/urban), monthly family income and smoking status.

Patient selection and assessments

A total of 218 consecutive inpatients and outpatients with cutaneous involvement during the course of LE were included in the study irrespective of age and sex. Data were obtained by questionnaires filled in by patients during their routine visits to the 'Lupus Clinic' and by extracting medical records. Diagnosis of CLE was established based on clinical manifestation and skin biopsy, if necessary. Patients were classified into 3 CLE subtypes – ACLE, SCLE, or CCLE – according to Sontheimer *et al.* and Kuhn *et al.* [2, 13]. The disease activity and damage of CLE were assessed according to the Cutaneous Lupus Erythematosus Disease Area and Severity Index (CLASI) [14].

The study protocol excluded patients who met the criteria for SLE but did not have LE-specific cutaneous manifestations, and patients who had clinical findings consistent with CLE but whose diagnosis was not confirmed on follow-up.

Pathological investigations

Routine blood, urinalysis, and other biochemical tests were performed. Chest X-ray, and echocardiography and electrocardiography were performed in the recommended patients. C3 and C4 levels were measured if needed. Tests for antinuclear antibodies (ANA) and anti-ds DNA antibodies and autoantibodies to extractable nuclear

antigens (ENA) (Sm and Sm/RNP) were studied where applicable.

Ethical issues

The study was conducted in accordance with the Data Protection Act and according to the ethical guidelines of the Declaration of Helsinki and was approved by the Ethics Committee at Chittagong Medical College, Bangladesh.

Statistical analysis

SPSS Statistics version 23 was used for analysis. Descriptive statistics included frequencies, mean, standard deviation, median, minimal, and maximal values. Continuous data were reported as the means \pm standard deviations (SD) and with regard to categorical ones, we used number and percentages. Proportions were presented with 95% confidence intervals (95% CI). The differences between studied groups were verified with the χ^2 test, with Yates' correction, where appropriate. *P*-values less than 0.05 were considered as statistically significant.

Results

Demographic characteristics

There were 187 (86%) females and 31 (14%) males, with the female:male ratio being 6 : 1. The mean age was 30.0 ± 11.7 , ranging between 11 and 65 years. The majority of the patients 142 (65.1%) were from a rural area and 76 (34.9%) from an urban area. Most of the male patients 29 (93.5%) were smokers (Table 1).

Table 1. Demographic characteristics of patients (*n* = 218)

Characteristics	Frequency (% , 95% CI)	
Age	≤ 18 years	32 (14.7%, 10.3–20.1%)
	18–50 years	170 (78.0%, 71.9–83.3%)
	> 50 years	16 (7.3%, 4.3–11.7%)
Sex	Male	31 (14.2%, 9.9–19.6%)
	Female	187 (85.8%, 80.4–90.1%)
Educational status	Primary	53 (24.3%, 18.8–30.6%)
	Secondary	121 (55.5%, 48.6–62.2%)
	Above secondary	44 (20.2%, 15.1–26.1%)
Smoker	Male (<i>n</i> = 31)	29 (93.5%, 78.6–99.2%)
	Female (<i>n</i> = 187)	1 (0.01%, 0.0–2.9%)
Place of residence	Rural	142 (65.1%, 58.4–71.5%)
	Urban	76 (34.9%, 28.6–41.6%)
MFI (USD)	< 100	94 (43.1%, 36.6–50.0%)
	100–200	65 (29.8%, 23.8–36.4%)
	> 200	59 (27.1%, 21.3–33.5%)

MFI – monthly family income, USD – US dollar, CI – confidence interval.

Table 2. Clinical profile of patients stratified by sex and age groups (data expressed as frequency (percentage) with 95% confidence interval of the proportion)

Variables	Total (n = 218)	Sex		Age groups		
		Male (n = 31)	Female (n = 187)	< 18 years (n = 32)	18–50 years (n = 170)	> 50 years (n = 16)
CLE subtypes:						
ACLE	46 (21.1%, 15.9–27.1%)	1 (3.2%, 0.0–16.7%)	45 (24.1%, 18.1–30.8%)	7 (21.8%, 9.3–40.0%)	36 (21.2%, 15.3–28.1%)	3 (18.7%, 4.0–45.6%)
SCLE	18 (8.3%, 4.9–12.7%)	2 (6.5%, 0.1–21.4%)	16 (8.6%, 5.0–13.5%)	2 (6.2%, 0.1–20.8%)	16 (9.4%, 5.5–14.8%)	0 (0.0%, 0–2.6%)
CLE	154 (70.6%, 64.1–76.6%)	28 (90.3%, 74.2–98.0%)	126 (67.4%, 60.2–74.0%)	23 (71.9%, 53.2–86.2%)	118 (69.4%, 61.9–76.2%)	13 (81.3%, 54.3–95.9%)
		<i>p</i> = 0.02		<i>p</i> = 0.72		
LE-specific skin lesions:						
Photosensitivity	198 (90.8%, 86.2–94.3%)	31 (100%, 88.8–100%)	167 (89.3%, 84.0–93.3%)	27 (84.4, 68.2– 94.7%)	155 (91.2%, 85.9–95.0%)	16 (100%, 79.4–100%)
Discoid rash	155 (71.1%, 64.6–77.0%)	21 (67.7%, 48.6–83.3%)	134 (71.7%, 64.6–78.0%)	22 (68.7%, 50.0–83.9%)	123 (72.3%, 65.0–78.9%)	10 (62.5%, 35.4–84.8%)
Maculo-papular lupus rash	55 (25.2%, 19.6–31.5%)	4 (12.9%, 3.6–29.8%)	51 (27.3%, 21.0–34.2%)	7 (21.9%, 9.3–40.0%)	42 (24.7%, 18.4–31.9%)	6 (37.5%, 15.2–64.6%)
Oral ulcer	49 (22.5%, 17.1–28.6%)	5 (16.1%, 5.4– 33.7%)	44 (23.5%, 17.6–30.3%)	10 (31.2%, 16.1–50.0%)	38 (22.3%, 16.3–29.4%)	1 (6.2%, 0.2–30.2%)
Malar rash	46 (21.1%, 15.9–27.1%)	4 (12.9%, 3.6–29.8%)	42 (22.5%, 16.7–29.1%)	6 (18.7%, 7.2–36.4%)	35 (20.6%, 14.8–27.4%)	5 (31.2%, 11.0–58.7%)
Papulo- squamous rash	11 (5.0%, 2.5–8.8%)	0 (0.0%, 0.0–11.2%)	11 (5.9%, 3.0–10.3%)	1 (3.1%, 0.1–16.2%)	9 (5.3%, 2.4–9.8%)	1 (6.2%, 0.2–30.2%)
TEN-like lesions	7 (3.2%, 1.3–6.5%)	0 (0.0%, 0.0–11.2%)	7 (3.7%, 1.5–7.6%)	0 (0.0%, 0.0–10.9%)	6 (3.5%, 1.3–7.5%)	1 (6.2%, 0.2–30.2%)
Lichenoid lesions	7 (3.2%, 1.3–6.5%)	1 (3.2%, 0.1–16.7%)	6 (3.2%, 1.2–6.8%)	0 (0.0%, 0.0–10.9%)	7 (4.2%, 1.7–8.3%)	0 (0.0%, 0.0–20.6%)
LE-nonspecific skin lesions:						
Non-scarring alopecia	123 (56.4%, 49.6–63.1%)	18 (58.1%, 39.1–75.4%)	105 (56.1%, 48.7–63.4%)	21 (65.6%, 46.8–81.4%)	90 (52.9%, 45.1–60.6%)	12 (75.0%, 47.6–92.7%)
Livedo reticularis	18 (8.3%, 5.0–12.7%)	2 (6.4%, 0.8–21.4%)	16 (8.6%, 5.0–13.5%)	2 (6.2%, 0.8–20.8%)	14 (8.2%, 4.6–13.4%)	2 (12.5%, 1.5–38.3%)
Raynaud’s phenomenon	17 (7.8%, 4.6–12.2%)	1 (3.2%, 0.1–16.7%)	16 (8.6%, 5.0–13.5%)	3 (9.4%, 2.0–25.0%)	13 (7.6%, 4.1–12.7%)	1 (6.2%, 0.2–30.2%)
Vasculitis	15 (6.9%, 3.9–11.1%)	2 (6.4%, 0.8–21.4%)	13 (7.0%, 3.7–11.6%)	3 (9.4%, 2.0–25.0%)	11 (6.5%, 3.3–11.3%)	1 (6.2%, 0.2–30.2%)
Periungual telangiectasia	7 (3.2%, 1.3–6.5%)	0 (0.0%, 0.0–11.2%)	7 (3.7%, 1.5–7.6%)	1 (3.1%, 0.1–16.2%)	6 (3.5%, 1.3–7.5%)	0 (0.0%, 0.0– 20.6%)
Erythema multiforme	6 (2.7%, 1.0–5.9%)	2 (6.4%, 0.8–21.4%)	4 (2.1%, 0.6–5.4%)	1 (3.1%, 0.1–16.2%)	5 (2.9%, 1.0–6.7%)	0 (0.0%, 0.0– 20.6%)
Leg ulcer	5 (2.3%, 0.7–5.3%)	1 (3.2%, 0.1–16.7%)	4 (2.1%, 0.6–5.4%)	1 (3.1%, 0.1–16.2%)	3 (1.8%, 0.4–5.1%)	1 (6.2%, 0.2–30.2%)

CLE subtypes

Of the 218 patients with CLE, the CLE patients numbered 154 (70.6%), which was higher than other forms of CLE, followed by ACLE 46 (21.1%), and SCLE 18 (8.3%). Interestingly, ACLE was much more common in women

than in men. No significant relationship was found between CLE subtype and age (Table 2).

Cutaneous manifestations

Regarding LE-specific skin lesions, the most common manifestation was photosensitivity (*n* = 198, 90.8%),

Table 3. Pathological profile of patients stratified by sex and age groups ($n = 218$)

Variables	Total ($n = 218$)	Sex		Age groups		
		Male ($n = 31$)	Female ($n = 187$)	< 18 years ($n = 32$)	18–50 years ($n = 170$)	> 50 years ($n = 16$)
Anemia	92 (42.2%, 35.6–49.1%)	13 (41.9%, 24.5–60.9%)	79 (42.2%, 35.1–49.7%)	15 (46.9%, 29.1–65.3%)	73 (42.9%, 35.4–50.7%)	4 (25.0%, 7.3–52.4%)
Leucopenia	113 (51.8%, 45.0–58.6%)	17 (54.8%, 36.0–72.7%)	96 (51.3%, 43.9–58.7%)	13 (40.6%, 23.7–59.3%)	91 (53.5%, 45.7–61.2%)	9 (56.2%, 29.9–80.2%)
Thrombocytopenia	111 (50.9%, 44.1–57.7%)	20 (64.5%, 45.4–80.8%)	91 (48.7%, 41.3–56.1%)	18 (56.2%, 37.7–73.6%)	81 (47.6%, 39.9–55.4%)	12 (75.0%, 47.6–92.7%)
Lymphopenia	127 (58.3%, 51.4–64.9%)	17 (54.8%, 36.0–72.7%)	110 (58.8%, 51.4–65.9%)	19 (59.4%, 40.6–76.3%)	94 (55.3%, 47.5–62.9%)	14 (87.5%, 61.6–98.4%)
Raised ESR	161 (73.8%, 67.5–79.5%)	22 (71.0%, 52.0–85.8%)	139 (74.3%, 67.4–80.4%)	22 (68.7%, 50.0–83.9%)	129 (75.9%, 68.7–82.1%)	10 (62.5%, 35.4–84.8%)
Antinuclear antibodies	132 (60.5%, 53.7–67.1%)	19 (61.3%, 42.2–78.1%)	113 (60.4%, 53.0–67.5%)	20 (62.5%, 43.7–78.9%)	100 (58.8%, 51.0–66.3%)	12 (75.0%, 47.6–92.7%)
Anti-dsDNA antibodies	91 (41.7%, 35.1–48.6%)	15 (48.4%, 30.1–66.9%)	76 (40.6%, 33.5–48.0%)	11 (34.4%, 18.6–53.2%)	73 (42.9%, 35.4–50.7%)	7 (43.7%, 19.7–70.1%)
Proteinuria	48 (22.0%, 16.7–28.1%)	8 (25.8%, 11.9–44.6%)	40 (21.4%, 15.7–28.0%)	9 (28.1%, 13.7–46.7%)	35 (20.6%, 14.8–27.4%)	4 (25.0%, 7.3–52.4%)
Hematuria	37 (17.0%, 12.2–22.6%)	4 (12.9%, 3.6–29.8%)	33 (17.6%, 12.5–23.9%)	5 (15.6%, 5.3–32.8%)	28 (16.5%, 11.2–22.9%)	4 (25.0%, 7.3–52.4%)
24h UTP >0.5 g/d	36 (16.5%, 11.8–22.1%)	6 (19.3%, 7.4–37.5%)	30 (16.0%, 11.1–22.1%)	8 (25.0%, 11.5–43.4%)	26 (15.3%, 10.2–21.6%)	2 (12.5%, 1.5–38.3%)
Patients fulfilling SLICC-2012 criteria for SLE	61 (28.0%, 22.1–34.4%)	10 (32.3%, 16.7–51.4%)	51 (27.3%, 21.0–34.2%)	7 (21.9%, 9.3–40.0%)	47 (27.6%, 21.1–35.0%)	7 (43.7%, 19.7–70.1%)

Data are expressed as frequency (percentage) with 95% confidence interval of the proportion.

followed by discoid rash ($n = 154$, 71.1%) and maculopapular lupus rash ($n = 55$, 25.2%). Oral ulcer was seen in 49 (22.5%) patients and malar rash in 46 (21.1%) patients. Other observed LE-specific skin manifestations were papulo-squamous rash 11 (5%), toxic epidermal necrolysis (TEN)-like lesions ($n = 7$, 3.2%), lichenoid lesions ($n = 7$, 3.2%) and panniculitis ($n = 2$, 0.9%). Among LE-nonspecific skin lesions, the most common manifestation was non-scarring alopecia ($n = 123$, 56.4%) followed by livedo reticularis ($n = 18$, 8.3%), Raynaud's phenomenon ($n = 17$, 7.8%), vasculitis ($n = 15$, 6.9%) periungual telangiectasia ($n = 7$, 3.2%), erythema multiforme ($n = 6$, 2.7%), leg ulcer ($n = 5$, 2.3%), urticarial lesions ($n = 2$, 0.9%) and acanthosis nigricans ($n = 2$, 0.9%) (Table 2). The gender and age of patients did not influence the prevalence of any of the LE-specific or nonspecific cutaneous lesions (Table 2).

Immunological manifestations

Of the total of 218 patients studied, 132 (60.5%) patients had positive ANA. Anti-ds DNA antibodies were seen in 91 (41.7%) patients. Anti-Sm antibodies were found in 2 (0.9%) patients. Anti-phospholipid antibodies were positive in 9 (4.1%) and anti-RNP Ab in 3 (1.4%) patients.

Hematological manifestations

Hematological manifestations were seen in 161 (73.8%) patients. Increased erythrocyte sedimentation rate (ESR) was the most common hematological abnormality ($n = 161$, 73.8%), followed by lymphopenia ($n = 127$, 58.3%), leucopenia ($n = 113$, 51.8%), thrombocytopenia ($n = 111$, 50.9%), anemia ($n = 92$, 42.2%) and monocytopenia ($n = 37$, 17.0%). Lymphocytosis occurred in 12 (5.5%) patients (Table 3).

Urinary findings

A total of 48 (22.0%) patients presented with albuminuria. Red blood cells (RBC) were found in the urine of 37 (17.0%) patients. More than 0.5 g of proteins in a 24-hour urine sample (24-hour UTP) was positive in 36 (16.5%) patients (Table 3).

Discussion

The aim of this study was to determine the clinical and pathological profile of CLE in the Bangladeshi population. We carefully went through the registered records of patients. The results of the study were analyzed and compared with other previous studies.

Among the patients, females outnumber (187, 85.8%) males (31, 14.2%) with a sex ratio of 6 : 1. The mean age of onset of disease was 30 years (range: 11–65 years). These findings are similar to Indian studies by Kishor *et al.* and Binoy *et al.*, where they conducted a study on SLE patients [15, 16]. Other clinical studies have also consistently demonstrated a female predominance. In general, this percentage ranges from 78% to 96% in most studies, with a female-male ratio of even 10 : 1 [17, 18]. This excess of females is especially noteworthy in the 15- to 64-year-old age group, where ratios of age- and sex-specific incidence rates show a 6- to 10-fold female excess. These age-related differences in the female-male ratios have been considered to be related to hormonal changes [19].

In LE-specific skin lesions, the most common manifestation was photosensitivity (91%). The prevalence of photosensitivity in the previous studies ranged from 28% to 95% [19, 20]. CLE patients are photosensitive; therefore, disease prevalence might be higher in areas with more ambient sun exposure, such as Bangladesh. There is often a latency period of several weeks between ultraviolet exposure and disease symptoms, so it is important to repeatedly inform the patients about this association [21].

On the basis of CLASI score, 91 (42%) cases were considered as mild disease, 85 (39%) as moderate and 42 (19%) as severe CLE. Among LE-nonspecific skin lesions, the most common manifestation was non-scarring alopecia, 123 (56.4%), followed by livedo reticularis (8.3%), Raynaud's phenomenon (7.8%), vasculitis (6.9%) periungual telangiectasia (3.2%), erythema multiforme (2.7%), leg ulcer (2.3%) and urticaria (0.9%). Hair loss is a common and characteristic finding in patients with LE. It may be scarring, if preceded by discoid lupus erythematosus (DLE), or non-scarring. Urticaria, angioedema, and Raynaud's phenomenon are common cutaneous vascular reaction patterns. Some patients with LE demonstrated lesions suggestive of urticarial vasculitis, with prevalence ranging from 7% to 22% [22, 23]. The LE-nonspecific skin manifestations are not exclusive to LE disease but are often seen in patients with active SLE and also in several other autoimmune diseases. It is important to screen a patient with CLE for LE-nonspecific symptoms since their presence can imply systemic involvement and progression to SLE [8]. The number of different skin lesion types also correlated with disease activity. Patients with only one type of lesion usually have mild disease. Of note, ACLE has a strong association with systemic disease and nonspecific skin lesions always indicate disease activity.

The high incidence of CLE emphasizes the importance of following up these patients and recognizing the clinical presentation of disease. Although the cutaneous form of LE has a more indolent course, monitoring the patient's disease is still essential because the disease in some cases progresses to the systemic form, which has a direr prognosis. Early recognition of CLE by the phy-

sician translates to early management and, hopefully, to preventing transition of the disease to the systemic form. CLE and SCLE last for many years and may lead, like SLE, to severe work-related disability and limited life quality. Also, in a small proportion of patients with CLE, SLE develops during the course of their disease, which implies a considerable amount of medical management and costs for the community [12]. Signs of nephropathy, elevated antinuclear antigen titers, and arthralgia may serve as predictors for transition into SLE. In this study, 61 (28%) patients met ≥ 4 SLICC criteria for SLE. The diagnosis of SLE in these patients does not imply serious systemic disease, since SCLE and ACLE patients commonly meet criteria for SLE based on muco-cutaneous findings, immunological markers, and serological abnormalities. Both the ACR and SLICC criteria for SLE identify SCLE and ACLE patients with often relatively minimal systemic disease [24]. A 1959 case series by Scott and Rees studying the relationship between SLE and DLE reported that most cases of DLE progressed to SLE within 2 years [25]. Our findings have important implications for physicians and illustrate the importance of follow-up in these patients. While systemic involvement tends to be mild in most patients with CLE, the disease has a major impact on quality of life because the lesions are usually located on the face and the chronic forms can cause irreversible scarring. Moreover, up to 28% of patients with CLE are susceptible to developing SLE [26]. The different types of CLE share similar and overlapping pathological features to a greater or lesser extent. There is controversy as to whether SLE and CLE represent a spectrum of the same disease or are distinct disease phenotypes.

CLE is an example of a disorder requiring a multidisciplinary approach for its management. It has the potential to intersect with many disciplines, and each can contribute to providing the optimum outcome for patients. Therefore, a dermatologist is often the key facilitator for the primary diagnosis with referrals deriving from different disciplines. The subsequent management can take multiple and diverse pathways. Close and coordinated cooperation is important, and an understanding of cutaneous lupus by non-dermatologists is helpful [27]. In the dermatology clinic, it is possible to make a diagnosis of CLE in the absence of any features of SLE or with only some but not all of the features needed to define SLE. However, occasionally it can be difficult to determine exactly into which subcategory of CLE to place a patient when there are overlapping clinical features.

The study has several limitations. First, it was a hospital-based retrospective study with a relatively small sample size. Therefore, a population-based study outside the tertiary care setting on CLE patients will be instructive to validate the findings of the study. Second, there may be undiagnosed cases in the community that have not reached the health care system for screening and diagnosis, and other cases may have received care outside

the catchment area. Surveillance outside of the tertiary care setting is imperative for capturing the full spectrum of LE, in order to identify cases.

Conclusions

Photosensitivity was the most common clinical manifestation, whereas ANA was the most frequent autoantibody of the LE patients of this region. Patients with different subtypes of CLE have distinct clinical and pathological characteristics. In the absence of consensus on a definition that makes it possible to differentiate cutaneous forms of LE from SLE, the dermatologist's role in the correct diagnosis and classification of such patients is fundamental.

Acknowledgments

The authors acknowledge the assistance of all staff working in the 'Lupus Clinic' of Chittagong Medical College. We would like to thank all lupus patients for their participation in the study.

Conflict of interest

The authors declare no conflict of interest.

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