benefits of the CLBH received. Medical records provided patient demographics and AA history. Participants self-reported AA severity.

Participation and 1-month follow-up rates were 68% and 90%, respectively. Participants were predominantly female (83.3%), white, middle aged (mean age, 48.1 y), and married (60%); the mean time since AA diagnosis was 12.6 years, and the median number of dermatology clinic appointments was 6.5. In terms of AA scalp hair involvement, 6.7% reported full scalp hair; 43.3%, patchy but able to cover bald spots; 33.3%, patchy and not able to cover spots; 10%, almost totalis; and 6.7%, totalis. Groups did not differ on pretreatment outcomes, AA condition, or demographics.

Integrating CLBH was highly feasible. No clinic disruption occurred and 90% of treatment participants completed treatment in 1 session. CLBH was overwhelmingly perceived as beneficial (Table I); 100% reported increased dermatology care satisfaction, and 90% of participants endorsed as important addressing psychosocial issues during dermatology visits.

At follow-up, when controlling for AA severity, noteworthy nonsignificant trends were seen (Table II). For most outcomes, the treatment group reported better psychosocial functioning than the control group, with predominately medium effects sizes. Confidence intervals encompassed clinically meaningful differences, defined as an average item change of 1 step in the desired direction on the measure's response scale (eg, from 4 [quite a bit of embarrassment] to 3 [somewhat]).

To our knowledge, no prior research exists regarding CLBH in AA dermatology care. We found CLBH and the AA-specific protocol feasible, relevant, and promising for enhancing adult AA patients' psychosocial functioning. Although limited by 1 clinic site and CLBH provider (who herself has AA), unstandardized measures, and low power, these findings, if confirmed in future research, suggest that CLBH holds potential as a best practice in AA dermatology care.

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Diagnostic yield of skin biopsies of cutaneous red nodules in hospitalized immunocompromised children: A retrospective review from a single institution

To the Editor: Inpatient dermatology consultation is often requested for acute erythematous nodules in immunocompromised children. The differential diagnosis typically includes infection, drug toxicity, and inflammatory conditions, all of which may present similarly.[1-3] The purpose of this study was

Table I. Baseline demographic and clinical characteristics of the study population (N = 42)

Characteristics	Value
Age at biopsy, y, mean (range)	9.9 (0-20)
Sex, n (%)	
M	24 (57.1)
F	18 (42.9)
Underlying diagnosis, n (%)	
Primary immunodeficiency	6 (14.3)
Hematologic malignancy	32 (76.2)
Solid tumor	5 (11.9)
Inflammatory disease	2 (4.8)
Stem cell transplant	6 (14.3)
Neutropenic, absolute neutrophil count < 500 cells/μl, n (%)	25 (59.5)
Received immunosuppressant medication, n (%)	38 (90.5)

F, Female; *M*, male.

to determine the diagnostic yield, assess the impact, and identify clinical predictors of infectious outcomes of biopsies of erythematous papules or nodules taken from immunocompromised children.

We performed a retrospective chart review of hospitalized immunocompromised patients undergoing skin biopsy for acute-onset papules or nodules at our institution between 2011 and 2017. *Immunocompromise* was defined as neutropenia (absolute neutrophil count, <500 cells/μl), primary immunodeficiency, or exposure to immunosuppressive medication in the preceding month. We reviewed demographic and clinical characteristics, histologic diagnosis, correlation between tissue cultures and histology, diagnosis after clinical-pathologic correlation, and management. Data were analyzed using SAS/STAT, version 9.2 (SAS Institute, Cary, NC), and characteristics of those with infection were evaluated using chi square or Fisher's exact tests.

A total of 37 patients met inclusion criteria. With some patients undergoing multiple biopsies during prolonged or multiple hospitalizations, 42 biopsies were included. Table I describes baseline clinical characteristics. Biopsy helped narrow the differential diagnosis in 33 (78.6%) cases and guided management in 22 (52.4%) cases. In 9 (21.4%) cases, systemic antibiotics or antifungals were added after biopsy was used to diagnose infection. In 13 (31.0%) cases, systemic antibiotics, antivirals, and/or antifungals were discontinued after biopsy was used to establish a diagnosis or narrow the differential diagnosis.

Eighteen cases (42.9%) were infectious. Pathogens were most frequently fungal (44.4%), followed by viral (22.2%) and bacterial (16.7%). Tissue culture was performed in 40 cases, and results were positive in 15 (37.5%). Of the 15 cases with positive tissue culture results, 10 (66.7%) had corresponding histologic confirmation of infection. Noninfectious diagnoses included toxic erythema of chemotherapy (n = 5), Sweet's syndrome (n = 2), ruptured cyst (n = 2), hematoma (n = 2), drug eruption (n = 1), noninflammatory purpura (n = 1), and urticaria (n = 1).

Table II. Potential clinical predictors of infectious diagnosis

Characteristic (n)	Infectious diagnosis, n (%)*,†	*P* value‡
Fever		.76
Yes (24)	11 (45.8)	
No (18)	7 (38.9)	
Neutropenia		.21
Yes (25)	13 (52.0)	
No (17)	5 (29.4)	
Exposure to immunosuppressive medication		.12
Yes (38)	18 (47.4)	
No (4)	0 (0.0)	
Primary immunodeficiency		.21
Yes (6)	1 (16.7)	
No (36)	17 (47.2)	
Tachycardia		>.99
Yes (24)	10 (41.7)	
No (18)	8 (44.4)	
Lesion number		.033
Single lesion (11)	8 (72.7)	
Multiple lesions (31)	10 (32.3)	
Distribution of lesions		.24
Localized (15)	9 (60)	
Multifocal (11)	4 (36.4)	
Generalized (16)	5 (31.3)	
Ulceration		>.99
Yes (9)	4 (44.4)	
No (33)	14 (42.4)	
Pain		>.99
Yes (16)	7 (43.8)	
No (26)	11 (42.3)	
Bacteremia and/or fungemia		.73
Yes (12)	6 (50)	
No (29)	12 (41.4)	
Broad-spectrum antibiotics		>.99
Yes (39)	17 (43.6)	
No (3)	1 (33.3)	
Antifungal prophylaxis		.75
Yes (17)	8 (47.1)	
No (25)	10 (40)	
Empiric treatment with antifungal		.10
Yes (29)	15 (51.7)	
No (13)	3 (23.1)	

*Infectious diagnosis was confirmed in 18 of 42 cases.
†All percentages represent row percentage.
‡*P* value from Fisher's exact test comparing proportions with infection for each characteristic.

Table II summarizes potential predictors of infection. Diagnosis of infection was significantly more likely in patients with a single lesion (72.7%) compared to those with multiple lesions (32.3%) ($P = .033$). Infections presenting as a single lesion included bacterial (*Pseudomonas aeruginosa* and *Staphylococcus aureus*), fungal (*Fusarium*, *Candida*, *Curvularia*, and *Aspergillus* species), and viral (herpes simplex). It is possible that a single lesion may predict infection, given the propensity for direct inoculation through skin or indwelling catheters in hospitalized immunocompromised patients.[4] Infection was more likely in patients with neutropenia (52%) than in those without neutropenia (29.4%), but this was not statistically significant. Because of immunocompromised state and risk of infection, the majority of patients received empiric antimicrobial therapy at baseline; however, receipt of these medications did not negatively predict infection, suggesting that biopsy should be performed regardless of whether a patient is receiving empiric coverage.

Our findings support skin biopsy as a critical component of the care of hospitalized immunocompromised children with acute-onset papules or nodules. Biopsy changed management in more than half of cases and was used to diagnose infection in 43%, of which fungal causes were most common. Similar to prior studies, we found that a single lesion was predictive of infection.[1,5] Limitations include the retrospective study design and small sample size.

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Validating the optimal classification approach using International Classification of Diseases, 10th Revision codes to identify dermatology patients with acne

To the Editor: As the use of administrative databases to study acne becomes more common, accurate identification of patients with acne in these data

Table I. Participant characteristics

Characteristics	Patients with acne	Control individuals
Age, y, mean (SD)	23.9 (6.8)	28.8 (6.8)
Female, %	69.6	62.0
Acne treatments, %		
Topical retinoid	80.7	—
Topical antibiotic	33.7	—
Oral antibiotic	25.0	—
Spironolactone	13.7	—
Isotretinoin	7.3	—
Nonacne diagnoses coded as acne, n		
Folliculitis	2	—
Perioral dermatitis	1	—

SD, Standard deviation.