Table I. Demographic and clinical data of the studied groups

Characteristics	Patients with psoriasis	Patients with AD	Control individuals	*P* value*
Age, y				
Mean	46.13	45.07	47.7	.698
SD	13.87	14.16	6.67	
Sex, n (%)				
Male	19 (63.3)	20 (66.7)	15 (50)	.378
Female	11 (36.7)	10 (33.3)	15 (50)	
Positive family history, n (%)	4 (13.3)	5 (16.6)	—	—
Duration of disease, mo				
Range	1-260	0.5-240	—	—
Mean ± SD	109.90 ± 87.91	54.77 ± 66.06		
Severity of disease: PASI for psoriasis and EASI for AD				
Range	0.9-28.5	1.2-6.6	—	—
Mean ± SD	8.09 ± 6.38	3.92 ± 1.69		

AD, Atopic dermatitis; *EASI*, Eczema Area and Severity Index; *PASI*, Psoriasis Area and Severity Index; *SD*, standard deviation.
*$P < .05$ indicates significance.

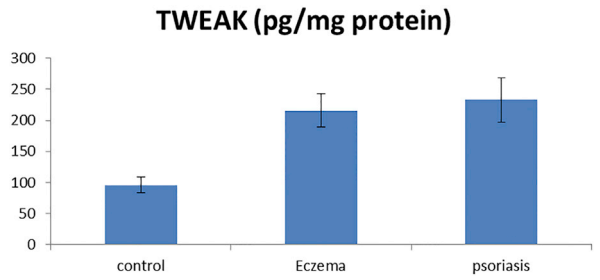

Fig 1. Level of tumor necrosis factor–like weak inducer of apoptosis (TWEAK) in the studied groups.

psoriasis or AD are needed to confirm this hypothesis.

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Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Reviewed and approved by research ethical committee at the Dermatology Department, Cairo University (approval no. 18/2018).

Reprints not available from the authors.

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https://doi.org/10.1016/j.jaad.2020.08.004

Patterns of incidental perineural invasion and prognosis in cutaneous squamous cell carcinoma: A multicenter, retrospective cohort study

To the Editor: Perineural invasion (PNI) is rare and usually incidental in cutaneous squamous cell carcinoma (SCC), with an incidence of 2.5% to 14%.[1] Incidental PNI is associated with poor prognosis in cutaneous SCC,[2] and some evidence suggests its outcome differs, depending on the PNI pattern. We evaluated patterns of incidental PNI, using a multicenter retrospective cohort of 140 cutaneous SCCs with incidental PNI to determine the influence of nerve involvement on cutaneous SCC prognosis.

Clinical and histopathologic data were recorded, including the risk factors listed in the *AJCC Cancer*

Table I. Descriptive summary of the cohort of cutaneous squamous cell carcinomas with incidental perineural invasion

Characteristic	pCSCC (n = 124)	rCSCC (n = 16)	*P*
Patient history			
Age, median (SD), y	83.72 (9.49)	85.43 (9.17)	NS
Sex, no. (%)			
Men	83 (66.9)	7 (43.7)	NS
Women	41 (33.1)	9 (56.3)	
Immunosuppression, no. (%)			
No	97 (78.2)	9 (56.3)	
Yes	27 (21.8)	7 (43.7)	
Type of immunosuppression, no. (%)			
Organ transplant recipient	7 (5.6)	0	NS
Chronic lymphocytic leukemia	10 (8.1)	2 (12.5)	
Immunosuppressive treatment	3 (2.4)	1 (6.25)	
HIV	0	1 (6.25)	
Diabetes, poorly controlled	1 (0.7)	0	
Other	5 (4)	4 (25)	
Tumor traits			
Location, no. (%)			
Head and neck, high risk (H zone)	59 (47.6)	11 (68.8)	NS
Head and neck, low risk (M zone)	58 (46.8)	5 (31.3)	
Not head or neck, low risk	7 (5.6)	0	
Tumor diameter, median (IQR), mm	20.68 (15.00)	28.93 (13.75)	NS
Tumor diameter, no. (%), mm			
<20	58 (46.8)	8 (50)	NS
≥20	66 (53.2)	8 (50)	
Tumor diameter, no. (%), mm			
<40	115 (92.7)	13 (81.3)	NS
≥40	9 (7.3)	3 (18.8)	
Thickness, median (IQR), mm	7.29 (4.15)	10 (10.38)	NS
Thickness, no. (%), mm			
<6	61 (49.2)	7 (43.7)	
≥6	63 (50.5)	9 (56.3)	NS
Invasion beyond the subcutaneous fat, no. (%)			
No	58 (46.8)	2 (12.5)	
Yes	66 (53.2)	14 (87.5)	.014
Grade of differentiation, no. (%)			
Good	6 (4.9)	1 (6.3)	NS
Moderate	77 (61.8)	7 (43.8)	
Poor	41 (33.3)	8 (50)	
Positive margins, no. (%)			
No	74 (59.7)	15 (93.8)	NS
Yes	50 (40.3)	1 (6.3)	
Treatment of cutaneous SCC, no. (%)			
Standard excision	75 (60.5)	3 (18.8)	NS
Standard excision plus radiation	47 (37.9)	9 (56.3)	
Mohs micrographic surgery	1 (0.80)	1 (6.25)	
Mohs micrographic surgery plus radiation	0	1 (6.25)	
Standard excision plus chemoradiotherapy	1 (0.80)	1 (6.25)	
Incidental PNI, no. (%)			
fPNI vs ePNI*			
fPNI	83 (66.9)	6 (37.5)	.03
ePNI	41 (33.1)	10 (62.5)	
PNI <0.1 vs ≥0.1 mm			
<0.1	69 (55.6)	3 (18.8)	.007
≥0.1	55 (44.4)	13 (81.3)	

Continued

Table I. Cont'd

Characteristic	pCSCC (n = 124)	rCSCC (n = 16)	*P*
Deep nerve invasion			
No	87 (70.2)	6 (37.5)	.02
Yes	37 (29.8)	10 (62.5)	
Poor outcome events, no. (%)			
LR			
No	92 (74.2)	6 (37.5)	NS
Yes	32 (25.8)	10 (62.5)	
LP			
No	96 (77.4)	10 (62.5)	NS
Yes	28 (22.6)	6 (37.5)	
DSD			
No	109 (87.9)	9 (56.25)	.004
Yes	15 (12.1)	7 (43.65)	

DSD, Disease-specific death from cutaneous SCC; *ePNI*, extensive PNI; *fPNI*, focal PNI; *IQR*, interquartile range; *LP*, lymphatic progression; *LR*, local recurrence; *NS*, not significant; *pCSCC*, primary cutaneous SCC; *PNI*, perineural invasion; *rCSCC*, recurrent cutaneous SCC; *SCC*, squamous cell carcinoma; *SD*, standard deviation.

*ePNI/multiple nerve involvement was considered when 3 or more nerves were affected on the same slide.

Staging Manual, Eighth Edition of the American Joint Committee on Cancer and the patterns of incidental PNI. Cox proportional hazards regressions with competing risks were performed for local recurrence; lymphatic progression, which included nodal and in-transit metastases; and disease-specific death (Supplemental material available via Mendeley at https://data.mendeley.com/datasets/52jy55hkgk/1). The mean follow-up period was 39.73 months (standard deviation 29.22 months).

A total of 124 of the 140 cutaneous SCCs with incidental PNI were primary tumors. Recurrent and primary tumors were not pooled for analysis because of the well-known poorer prognosis of the former subset (Table I). Univariate and multivariate analytic results are shown in Fig 1 and the Supplemental material. All 3 incidental PNI patterns, extensive PNI/multiple nerve involvement, PNI greater than or equal to 0.1 mm, and deep nerve involvement were associated with poorer prognosis. Tumor diameter was independently associated with all outcomes. PNI greater than or equal to 0.1 mm was significantly associated with lymphatic progression in the univariate (hazard ratio [HR] = 2.58 [95% CI, 1.19-5.6]; $P = .02$) and multivariate (HR = 2.97 [95% CI, 1.016-8.71]; $P = .046$) models. Extensive PNI was significant for lymphatic progression in the univariate model (HR = 2.11 [95% CI, 1.01-4.43]; $P = .048$), and with local recurrence only in the multivariate analysis (HR = 2.17 [95% CI, 1.034-4.562]; $P = .04$). Finally, deep nerve involvement was associated with lymphatic progression (HR = 2.95 [95% CI, 1.4-6.19]; $P = .004$) and disease-specific death (HR = 3.32 [95% CI, 1.18-9.32]; $P = .02$) in the univariate, but not the multivariate, models.

Some studies have suggested a poorer outcome in the PNI greater than or equal to 0.1 mm group,[3,4] and extensive PNI confers a poorer outcome on nonmelanoma skin cancers.[1,5] Additionally, deep nerve involvement is a proven relevant prognostic feature. Indeed, all such PNI characteristics are covered by the *AJCC Cancer Staging Manual, Eighth Edition*, in which the tumor stage has been upgraded to T3.[3] We confirm that all these PNI features are associated with poor prognosis in our cohort.

Some authors argue that the prognostic effect of large-nerve involvement arises from the presence of other high-risk cutaneous SCC factors accompanying the PNI,[4] but in our study, PNI greater than or equal to 0.1 mm was also independently associated with lymphatic progression. PNI greater than or equal to 0.1 mm may indeed identify a higher-risk subgroup of *AJCC Cancer Staging Manual, Eighth Edition* T3 tumors. We believe a consensus concerning the definition of extensive PNI/multiple nerve involvement is required: 2 earlier studies used different definitions of involvement (≥2 and >2 nerve branches [Karia et al[2] and Sapir et al,[5] respectively]). It may be difficult to establish the number of nerves defining extensive PNI because this can vary among sections, and only 2% of the tumor mass is routinely evaluated when cutaneous SCC is diagnosed after standard excision. Thus, we question the continued use of extensive PNI, especially given the variability in the rates of reporting it.

In cutaneous SCCs with incidental PNI, tumor diameter and PNI greater than or equal to 0.1 mm are the features most closely associated with prognosis.

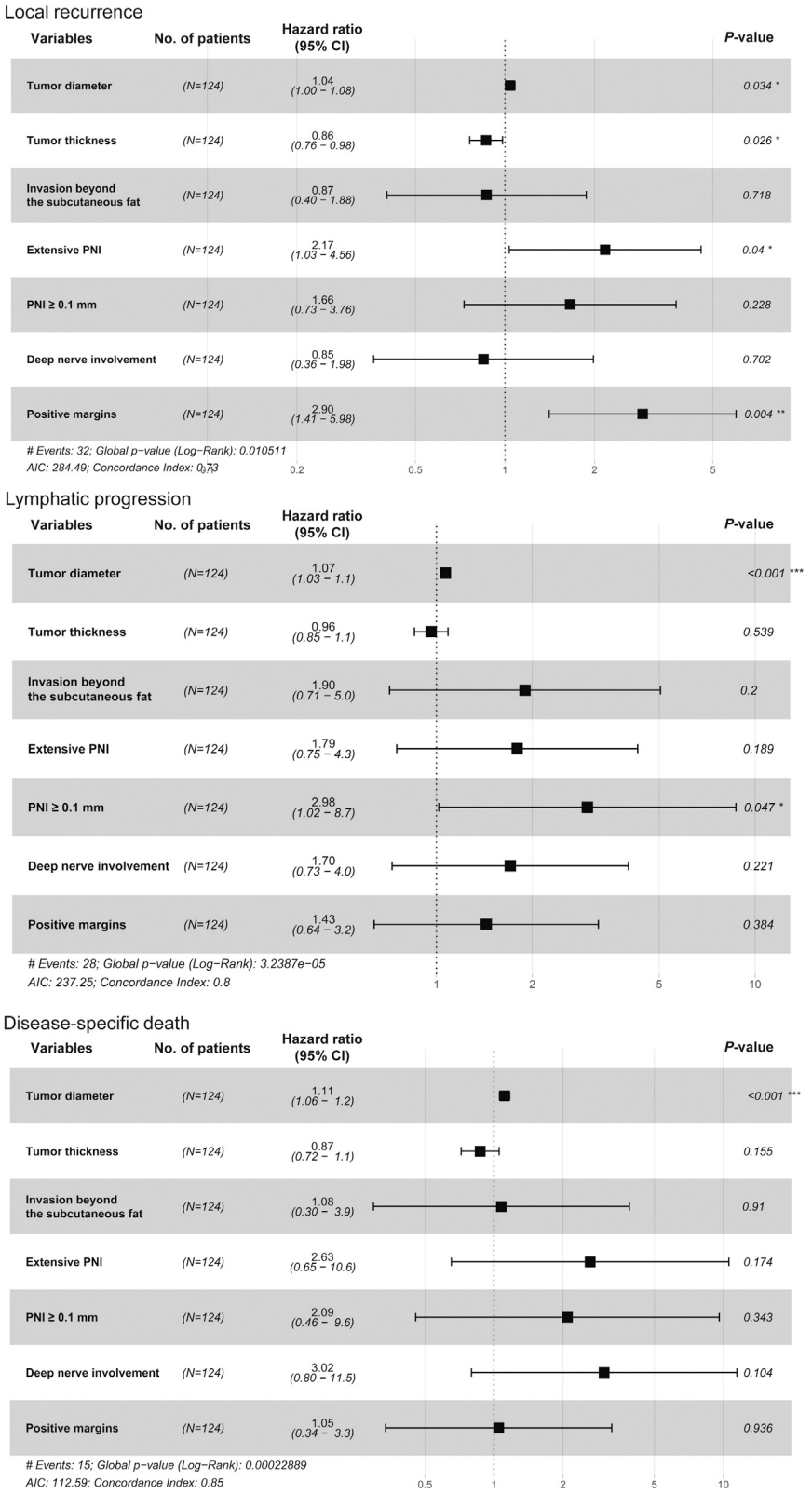

Fig 1. Forest plot for the multivariate cause-specific hazard models. Estimated results from local recurrence, lymphatic progression, and disease-specific death. *CI*, Confidence interval; *PNI*, perineural invasion.

Prospective studies are needed to establish the prognostic implications of patterns of incidental PNI, but until then, this study represents, to our knowledge, the most thorough evaluation of incidental PNI in cutaneous SCC.

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Funding sources: Dr Cañueto is partially supported by grants PI18/000587 (Instituto de Salud Carlos III, cofinanced by Fondo Europeo de Desarrollo Regional) and GRS 1835/A/18 (Gerencia Regional de Salud de Castilla y León).

Conflicts of interest: None disclosed.

Reprints not available from the authors.

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https://doi.org/10.1016/j.jaad.2020.08.017

Association of clinical severity scores with psychosocial impact in patients with hidradenitis suppurativa

To the Editor: Hidradenitis suppurative (HS) is a painful, debilitating, chronic inflammatory disease associated with significant psychiatric comorbidity, isolation, and stigma.[1] Global prevalence ranges between 0.1% and 4%, with an estimated 33% of patients reporting symptoms of major depressive disorder and increased substance abuse.[2,3] This study examined the ability of clinical severity scores to detect significant psychologic impact, as assessed by standard psychometric tools.

Patients attending the HS Centre of Excellence outpatient clinic, McGill University Health Centre, were invited to participate in the study if they were diagnosed with HS, were aged ≥18 years, and understood English/French. Ethical approval was secured, and informed consent was obtained from participants.

Study participants were interviewed using a pretested questionnaire comprising 3 sections: (1) demographic and clinical characteristics, (2) scales to assess disease severity, and (3) assessment scales for psychiatric comorbidities and emotional health. Four tools were used to assess HS severity: (1) Hurley staging, (2) HS Physician Global Assessment (HS-PGA), (3) Severity Assessment of HS (SAHS) scale, and (4) International HS Clinical Severity Score (IHS4). Tools used to assess psychiatric comorbidities and emotional health included the Dermatology Life Quality Index (DLQI) and the Beck Depression Inventory (BDI-21).[4] The latter has excellent sensitivity and specificity for screening for signs/symptoms of depression (additional details available