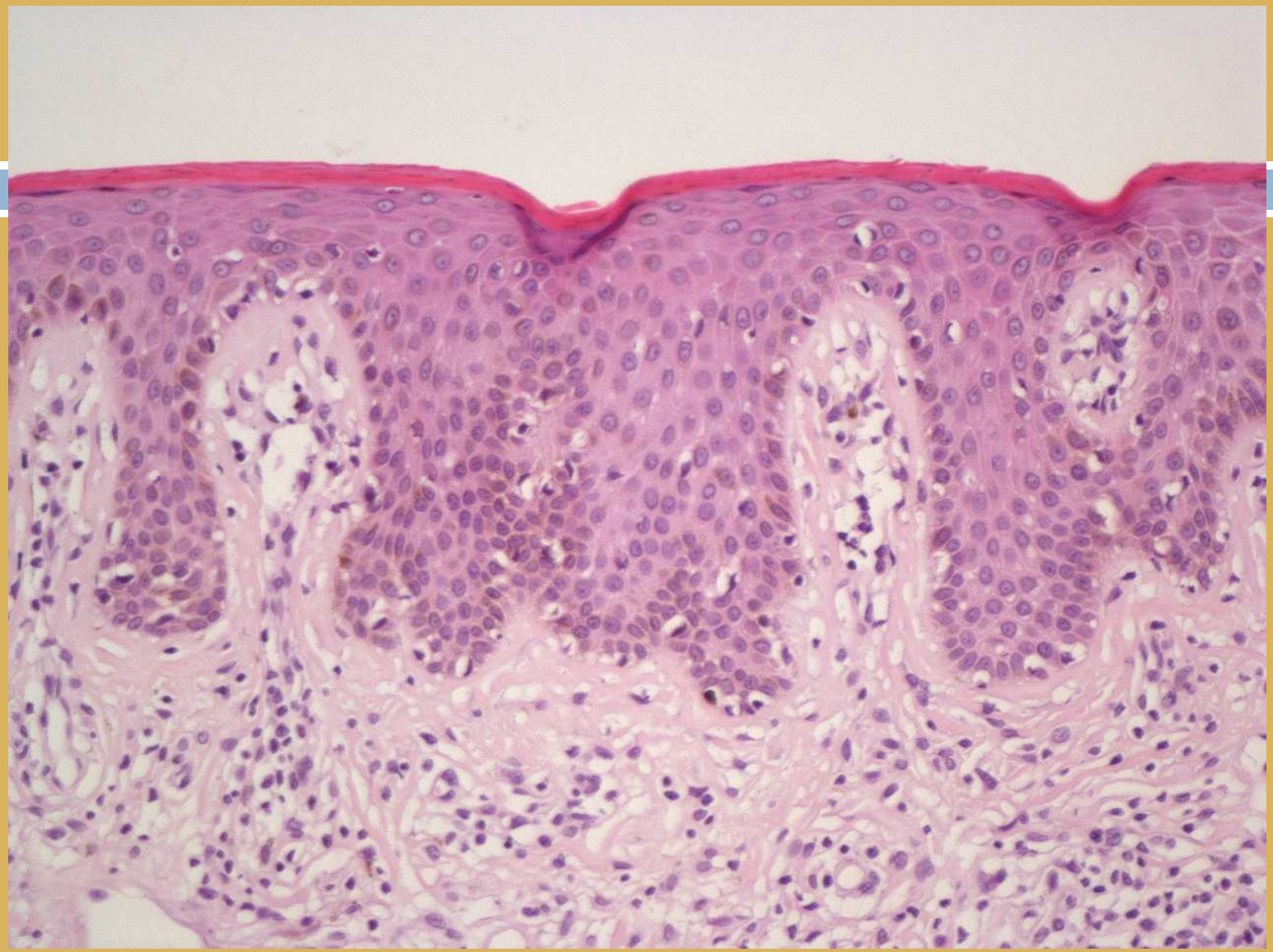
Sociedade brasileira de patologia

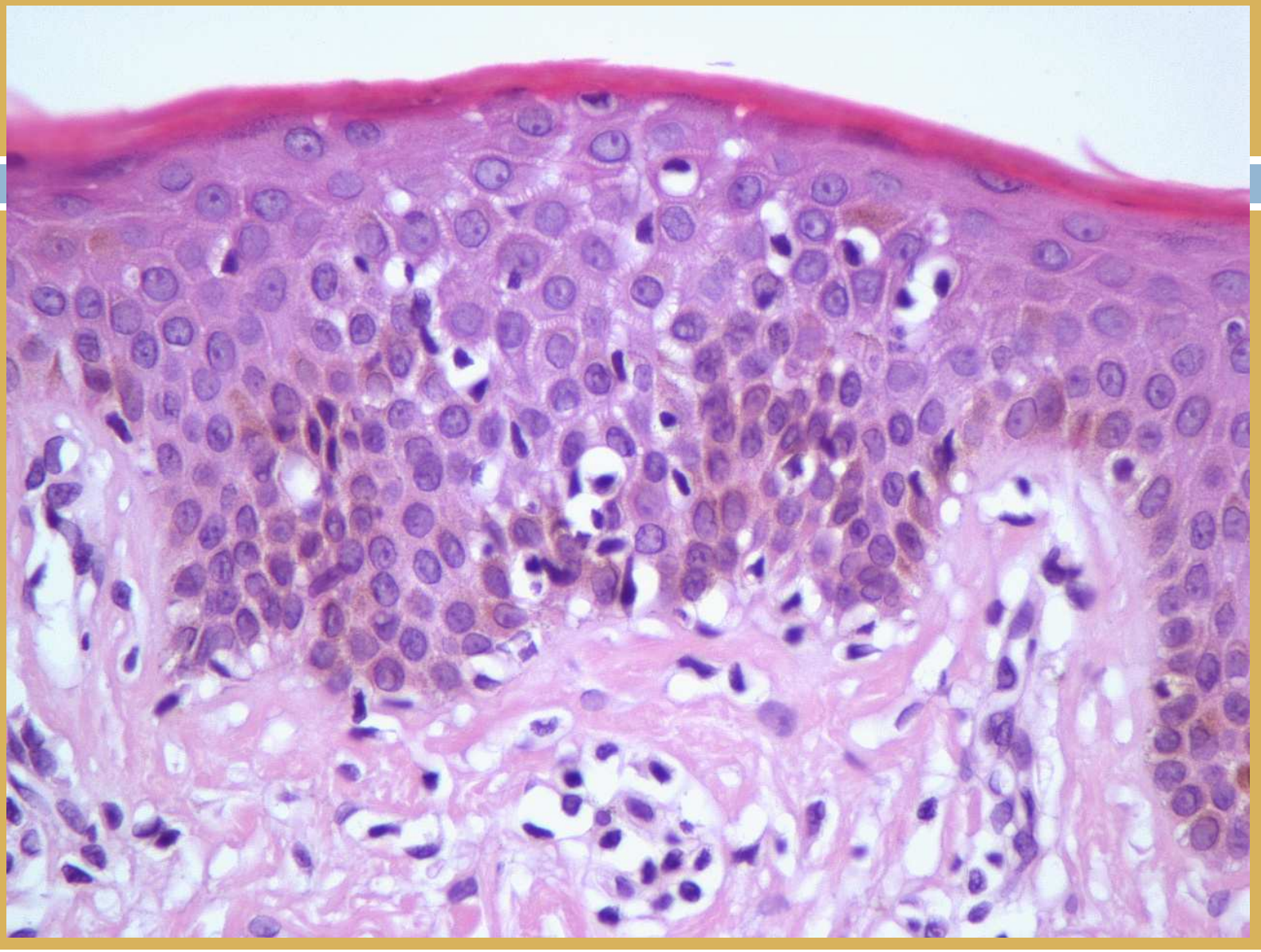
13º encontro do núcleo de especialidades
DERMATOPATOLOGIA

Jorge Alberto Thomé

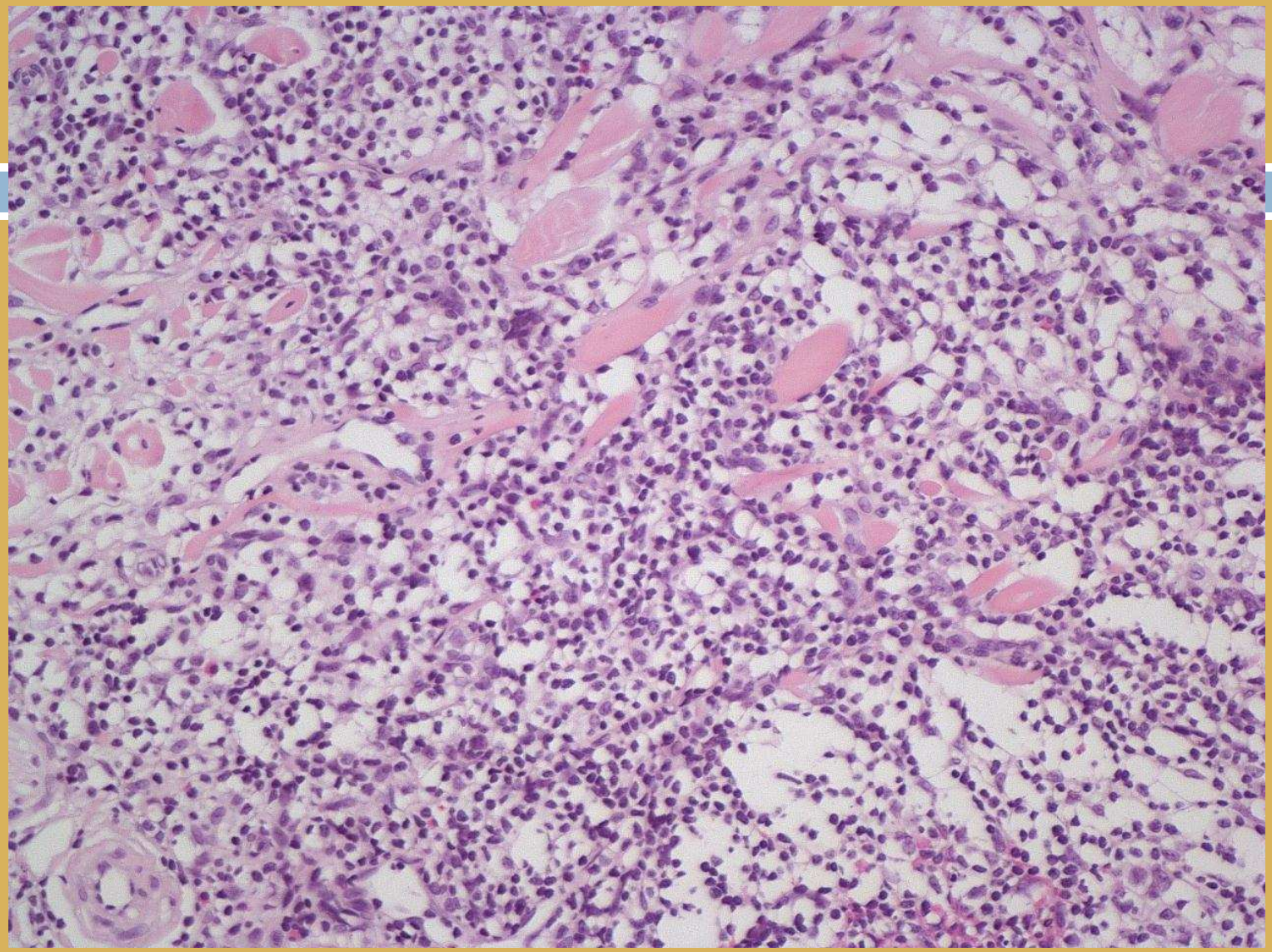
- **D1**

  Masculino, 55 anos, lesões papulosas infiltradas, vermelho-vinhosas, associadas à micronódulos que chegam a medir 0,5 cm. Predomínio em face. Compromete também região cervical e tronco.

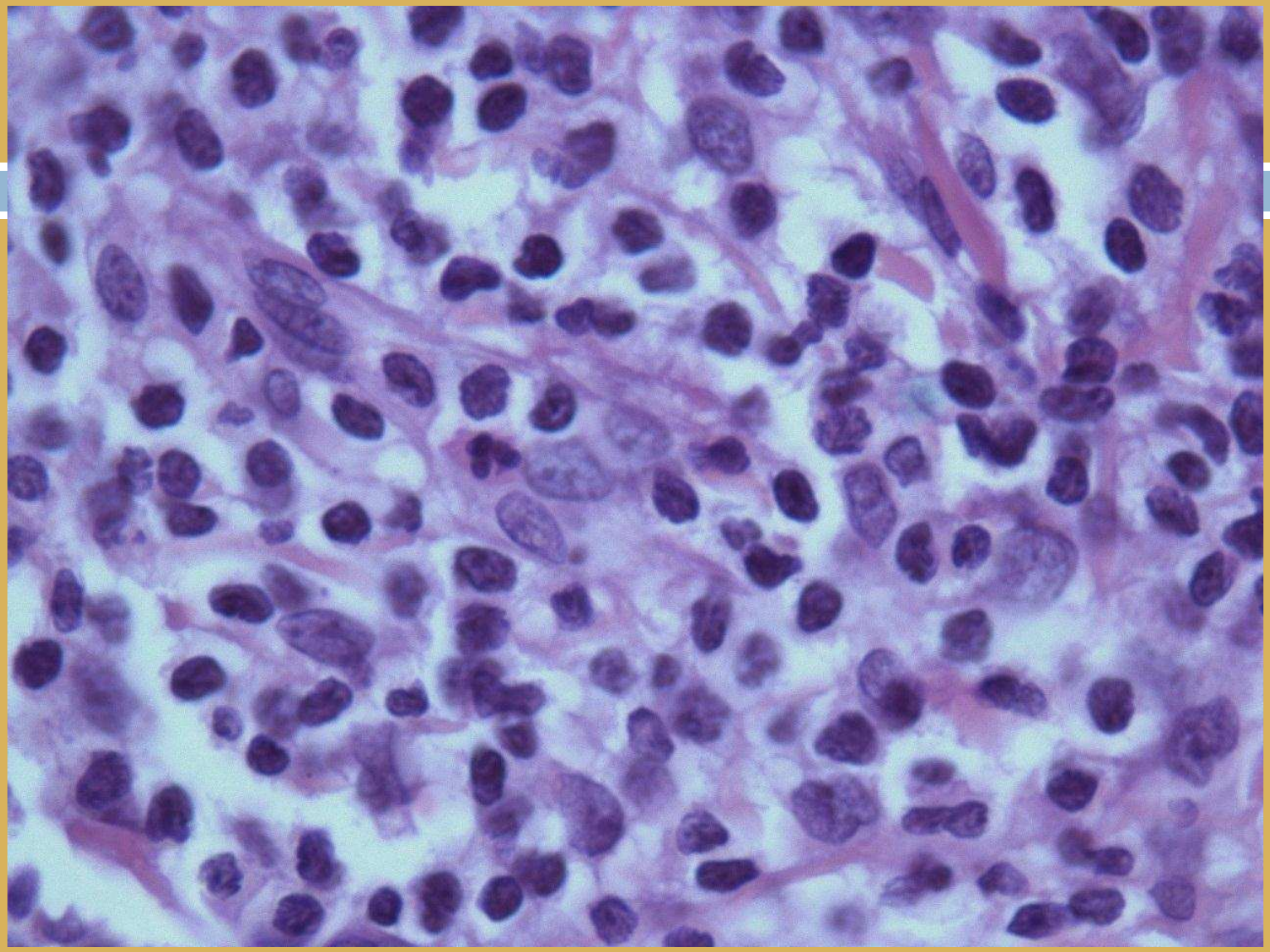




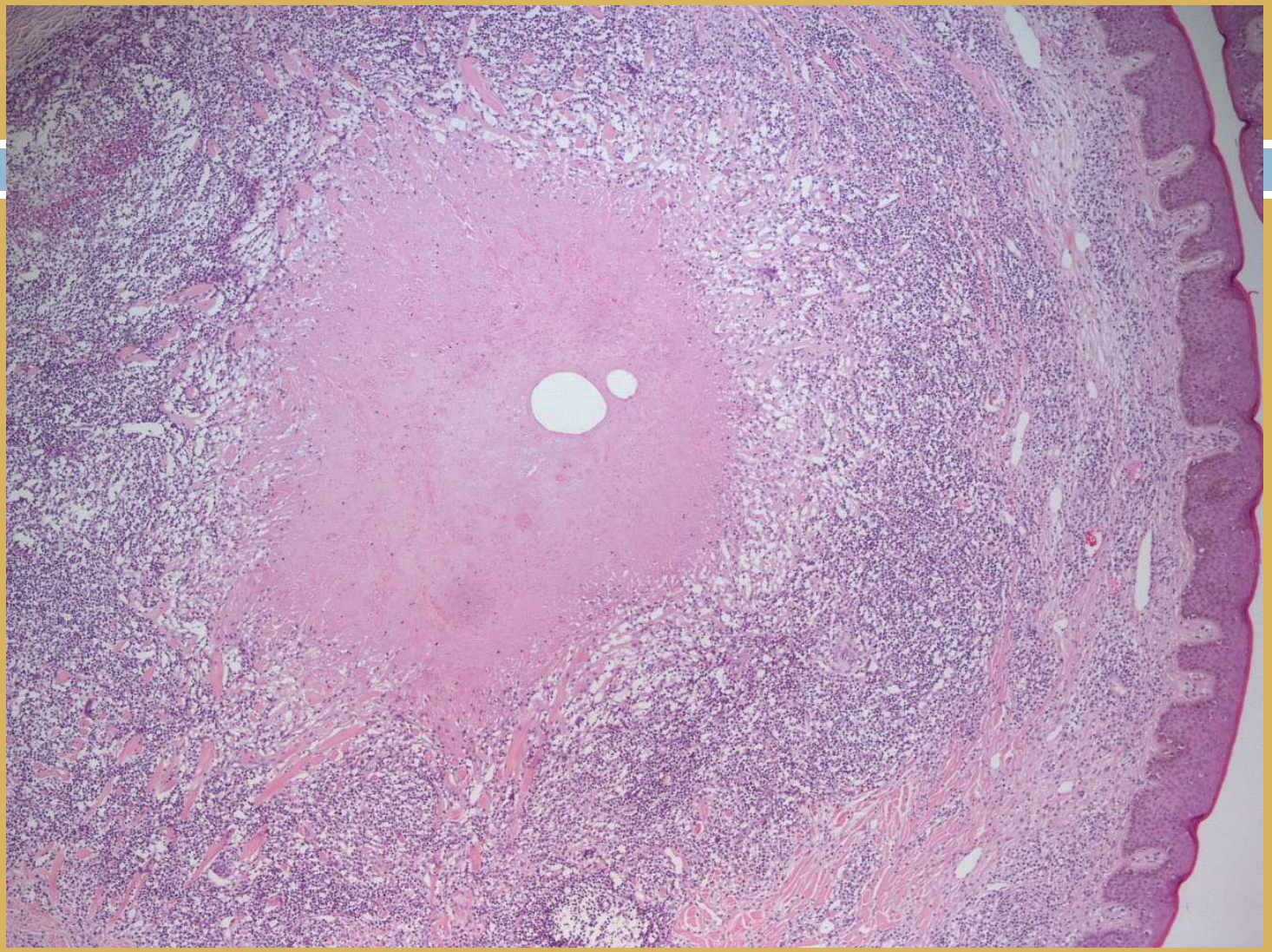
Detalhe da epiderme



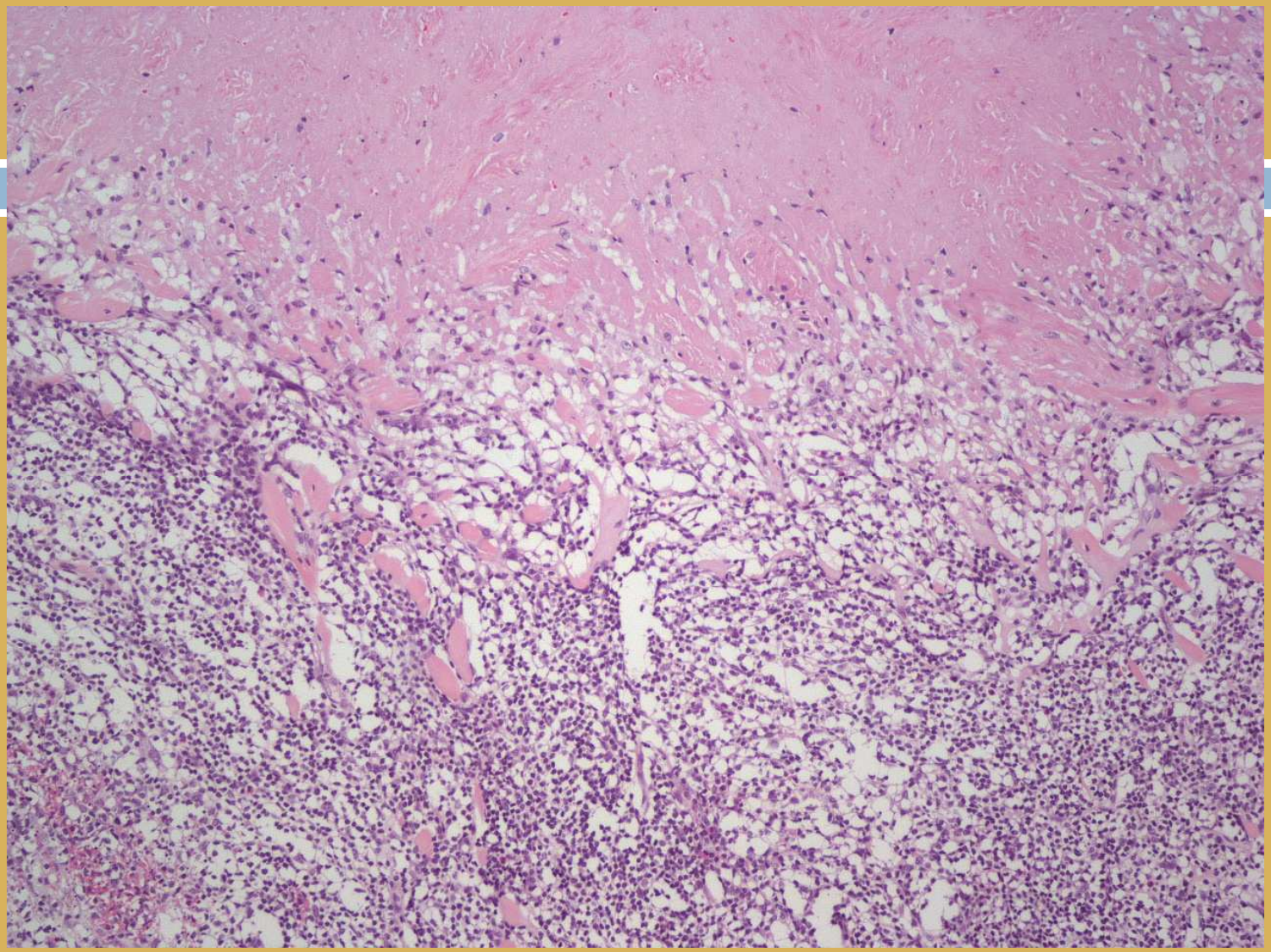
Infiltrado mononuclear dérmico



Detalhe do infiltrado mononuclear dérmico



Granuloma dérmico associado a necrobiose



Transição do granuloma e infiltrado mononucler

Diagnóstico?

PAINEL DE ANTICORPOS	CLONE	RESULTADOS
Antígeno de proliferação celular Ki-67	MIB1	Positivo (30%)
CD20 – antígeno de linfócitos B	L26	Positivo (em linfócitos B)
CD3 – receptor de linfócitos T (cadeia epsilon)	SP7	Positivo (em linfócitos T)
CD30 – antígeno Ki-1	BerH2	Positivo (em subset de células)
Citoceratinas de 40, 48, 50 e 50,6 kDa	AE1/AE3	Negativo
CD25	4C9	Positivo
CD56 – antígeno de células NK e subpopulação de linfócitos T	123C3	Negativo
Granzima B	GRAN-B	Negativo

PAINEL DE ANTICORPOS	CLONE	RESULTADOS
Antígeno de proliferação celular Ki-67	MIB1	Positivo (40%)
CD20 – antígeno de linfócitos B	L26	Negativo
CD3 – receptor de linfócitos T (cadeia epsilon)	SP7	Positivo
CD30 – antígeno Ki-1	BerH2	Negativo
CD56 – antígeno de células NK e subpopulação de linfócitos T	123C3	Negativo
CD25	4C9	Focalmente positivo

Imuno-histoquímica: CD 3+, CD 25+, Ki-67 30 a 40%

Biópsias anteriores:

Infiltração linfóide cutânea atípica associada a granulomas necrobióticos.

Nota: Quadro sugestivo de Linfoma T cutâneo
Necessária correlação com quadro clínico e laboratorial para confirmação.

Cynthia Magro,
Professor of Pathology and Laboratory Medicine
Director of Dermatopathology
Weill Medical College of Cornell University

Overall case comment:

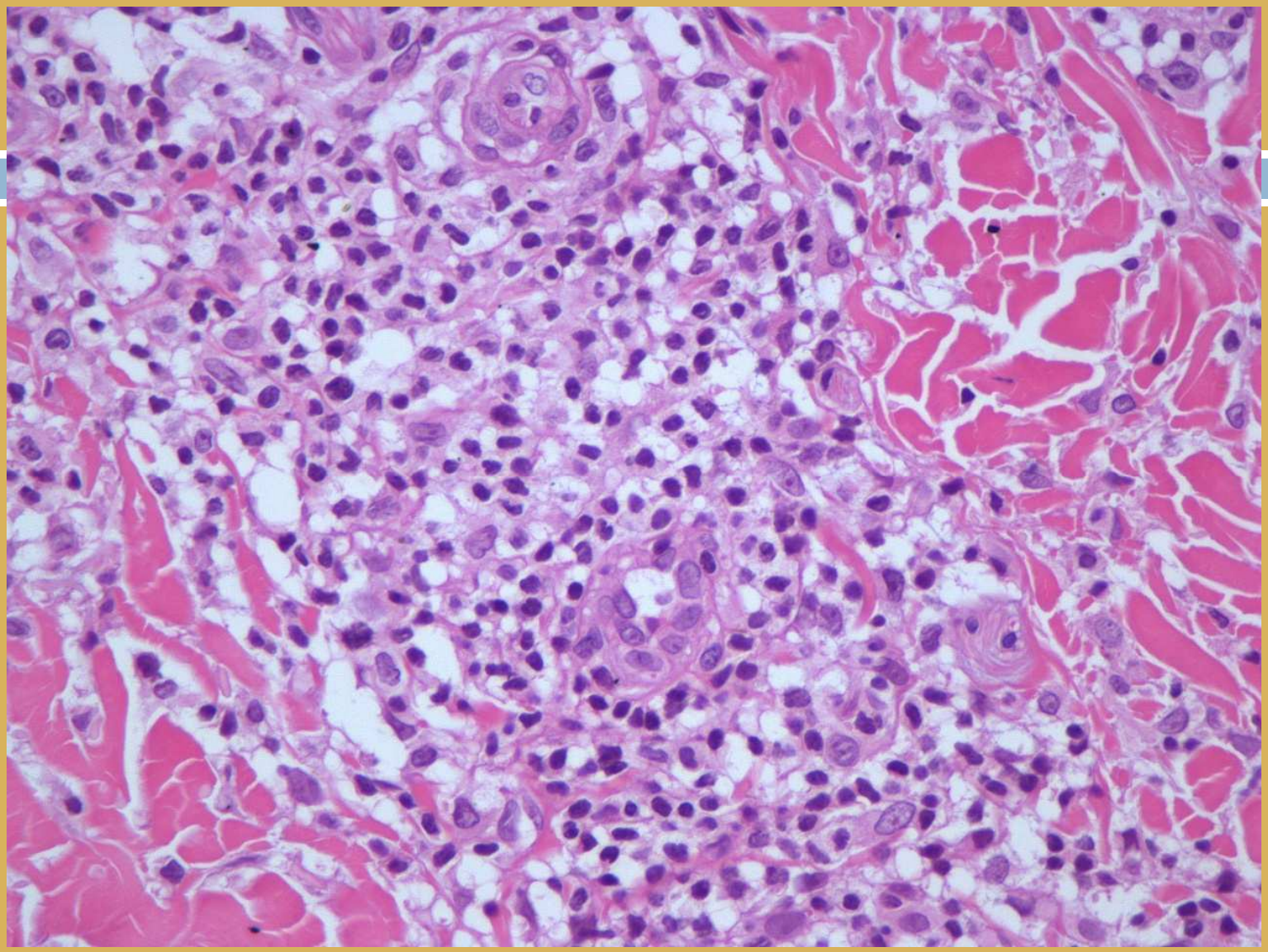
T correction in this patient is diagnostic of a rare and unique subset of mycosis fungoides falling under the apellation of follicular mycosis fungoides.

The patient also exhibits tumor stage features with marked involvement of the deep dermis of the cutaneous fat area.

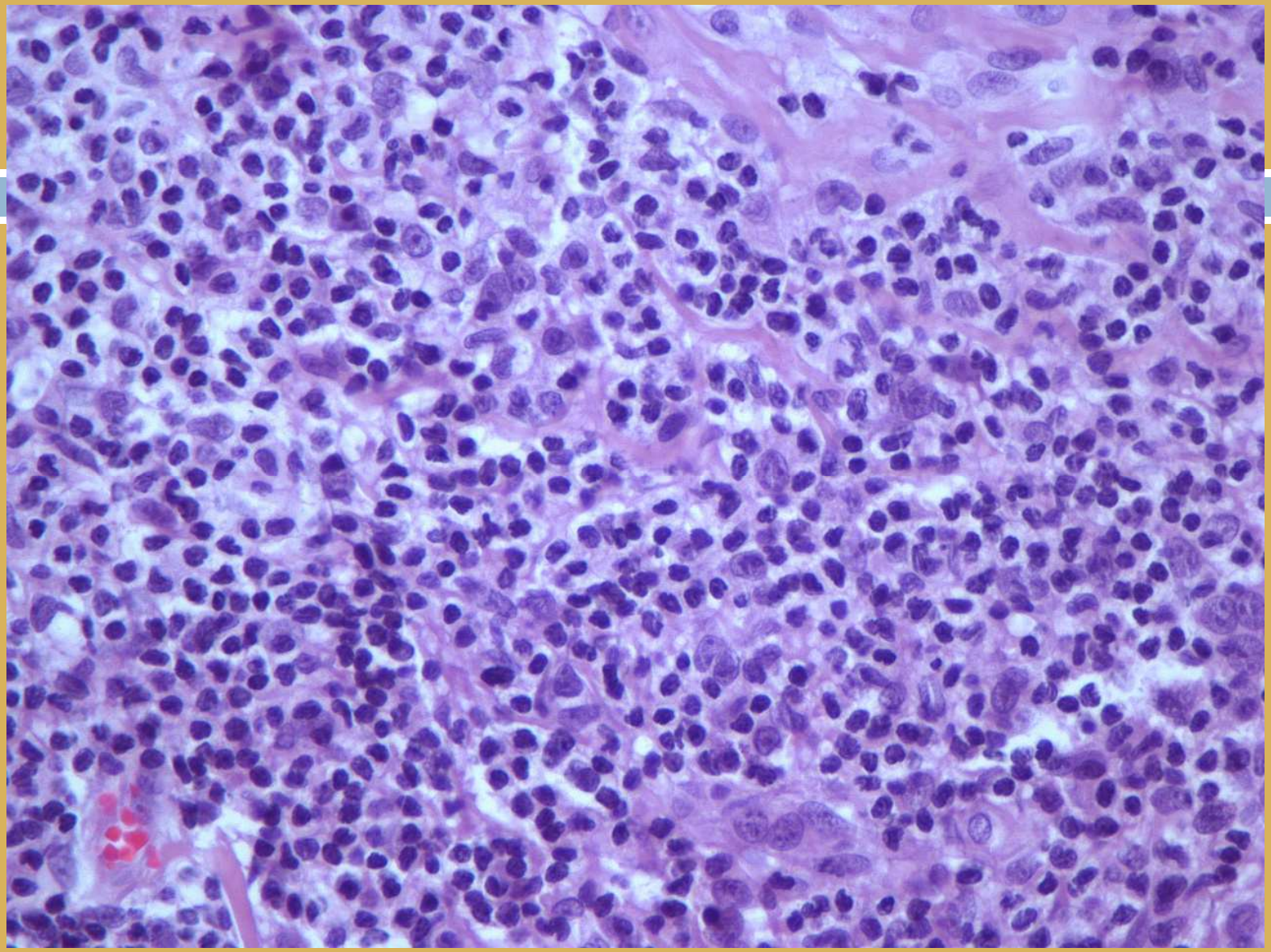
This form of mycosis fungoides responds with to systemic especially
with Bexarotene.

Diagnóstico:

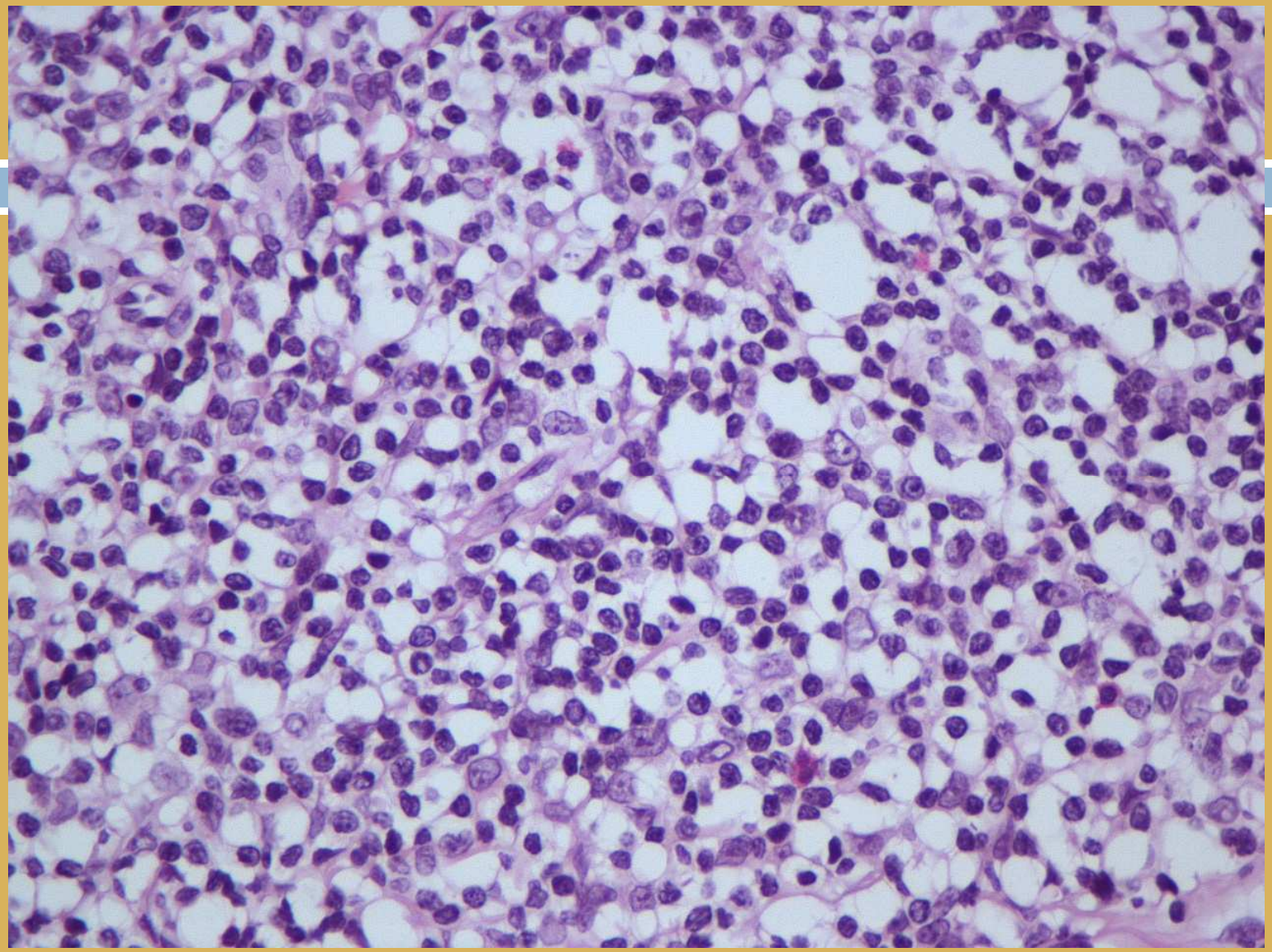
Micose fungóide de tipos folicular e granulomatoso.



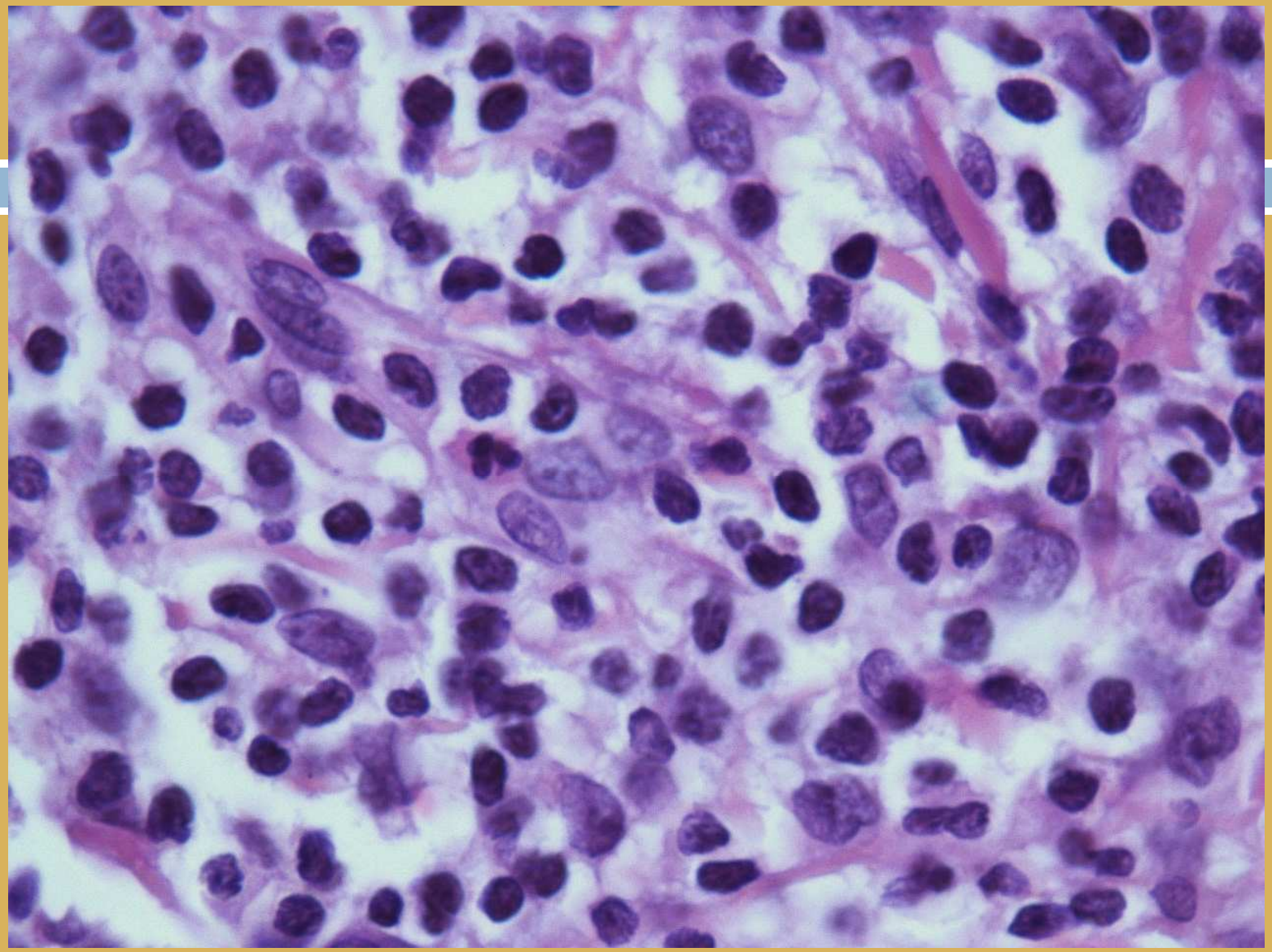
Infiltrado de células linfóides atípicas na derme



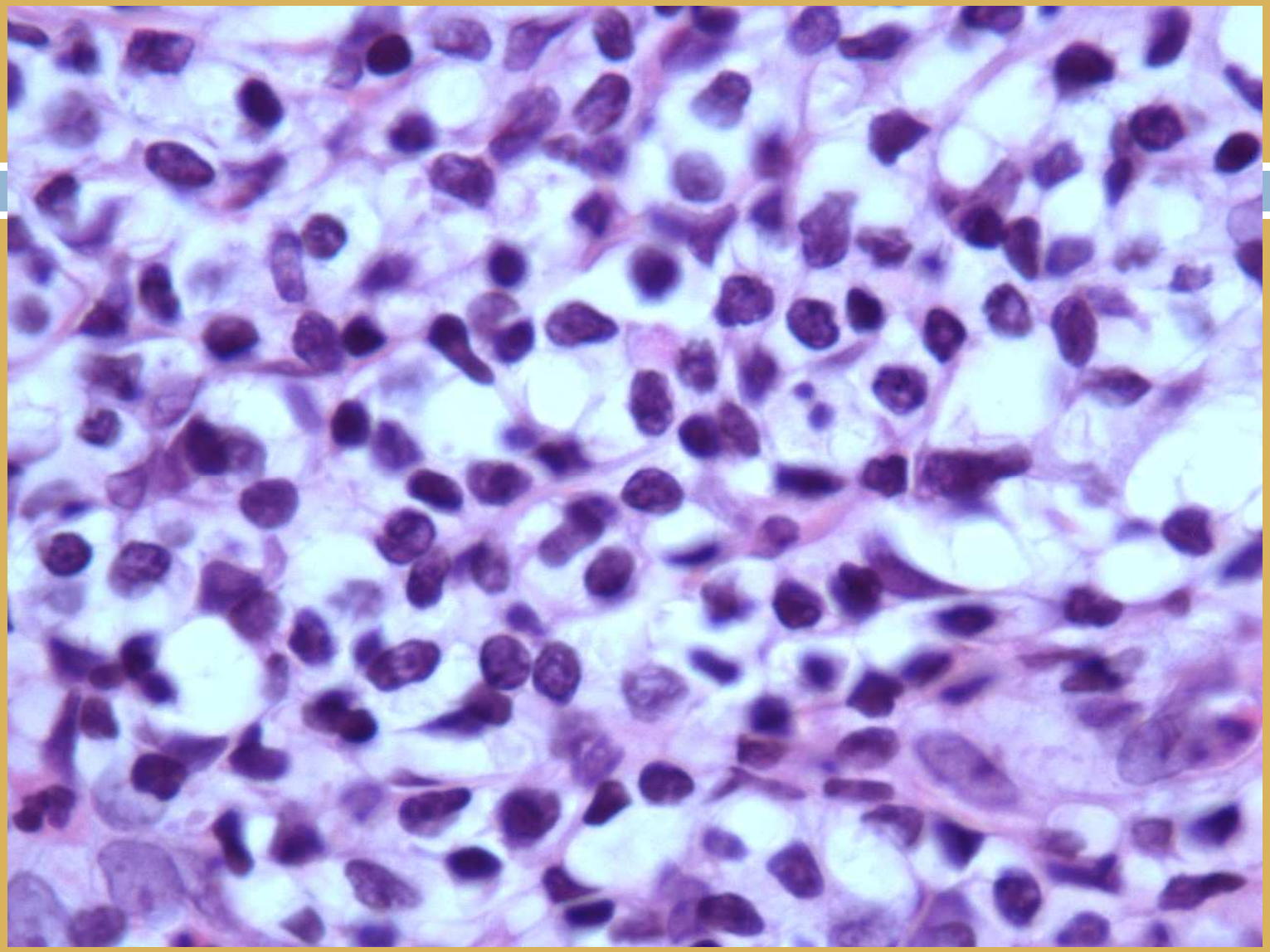
Infiltrado de células linfóides atípicas na derme



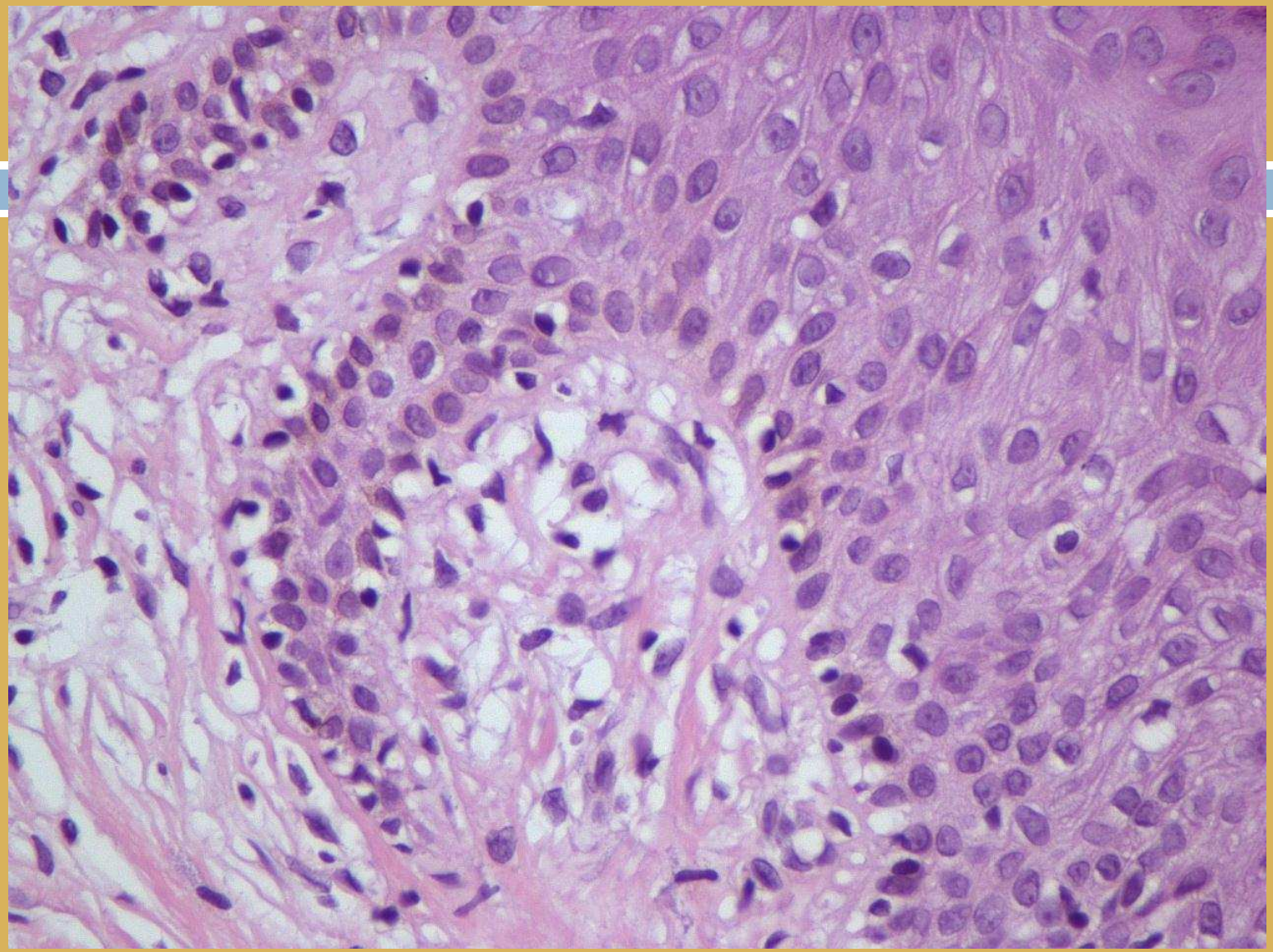
Infiltrado de células linfóides atípicas na derme



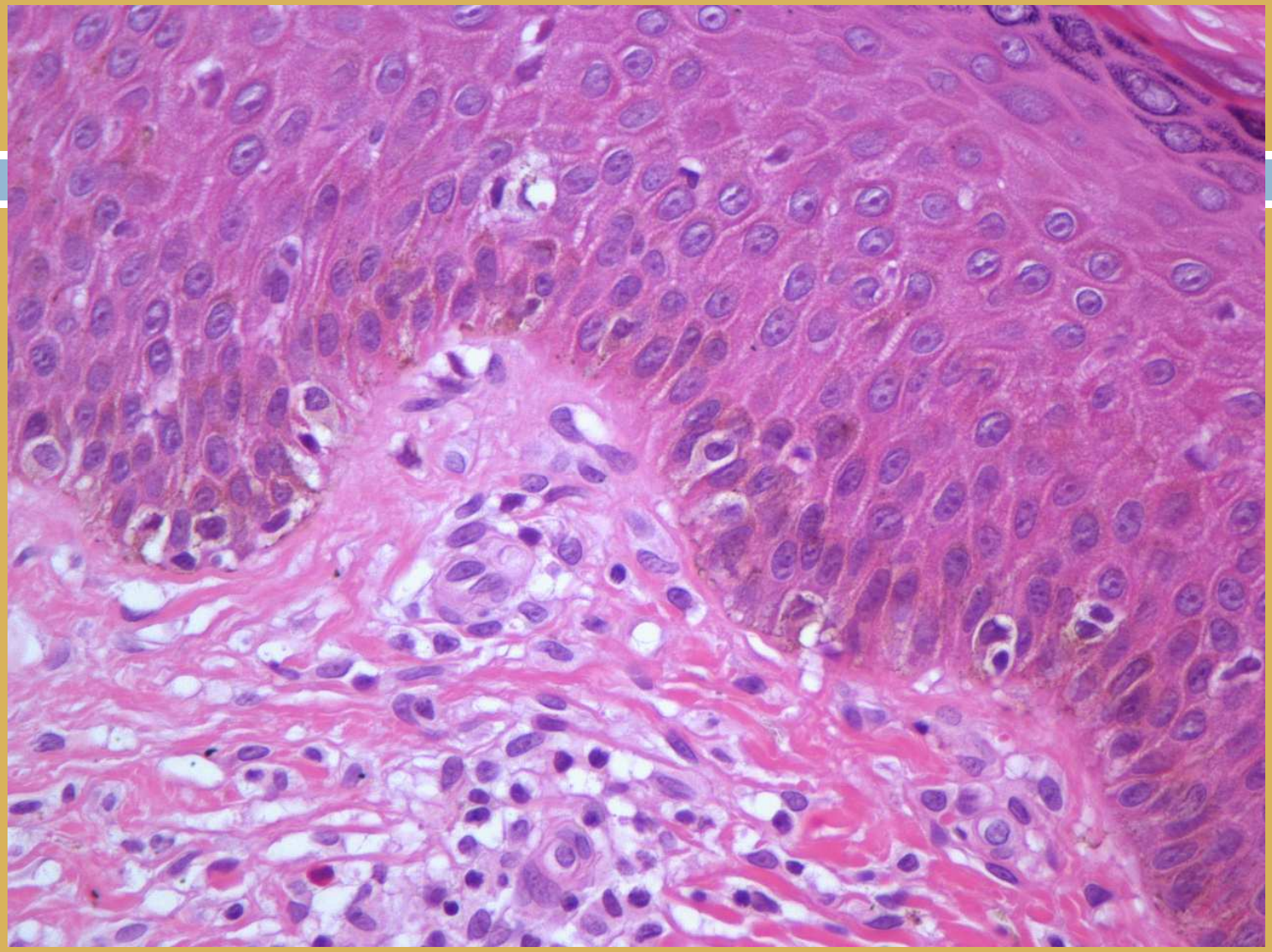
Infiltrado linfóide atípico com células de núcleos cerebriformes



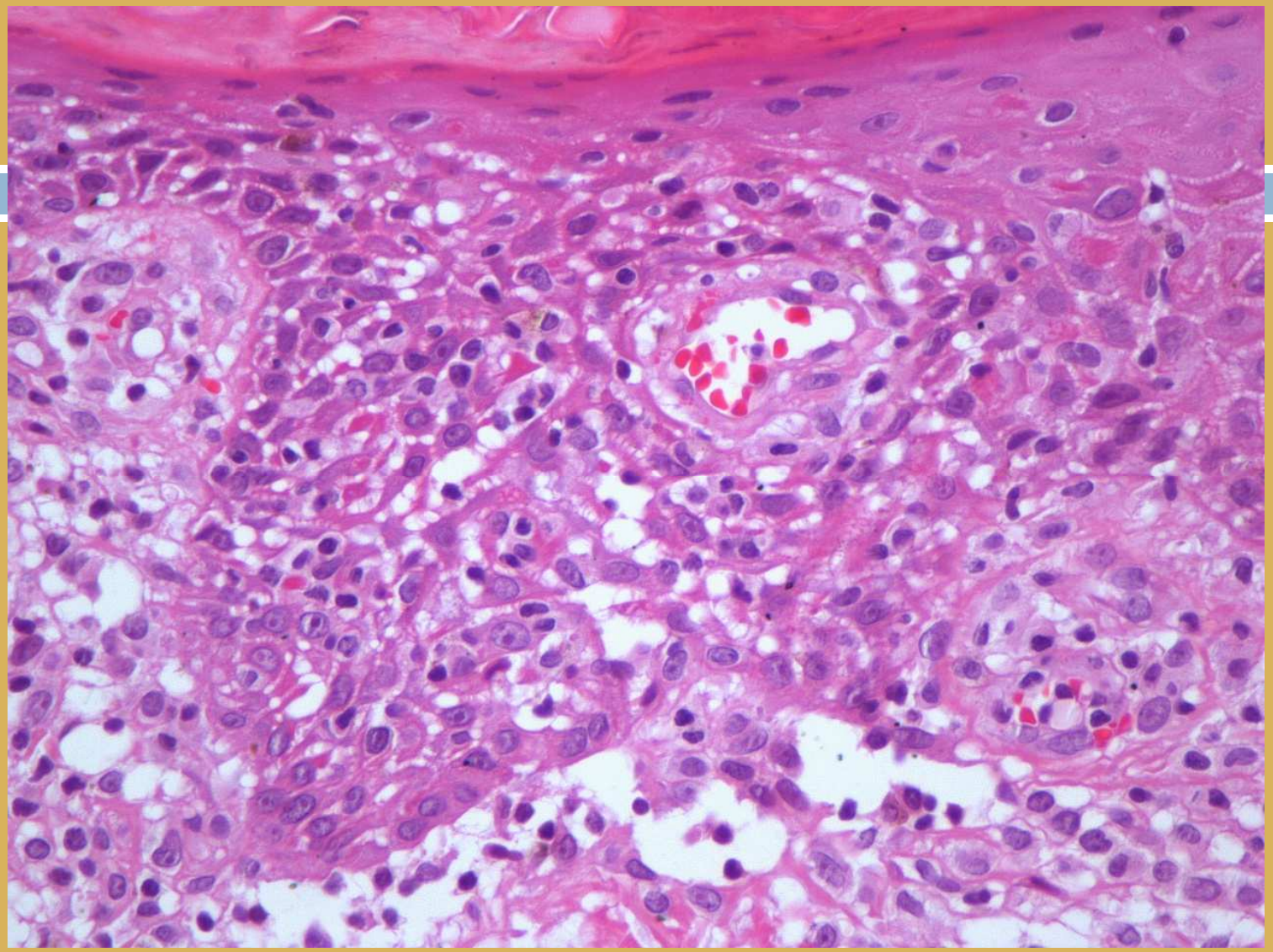
Infiltrado linfóide atípico com células de núcleos cerebriformes



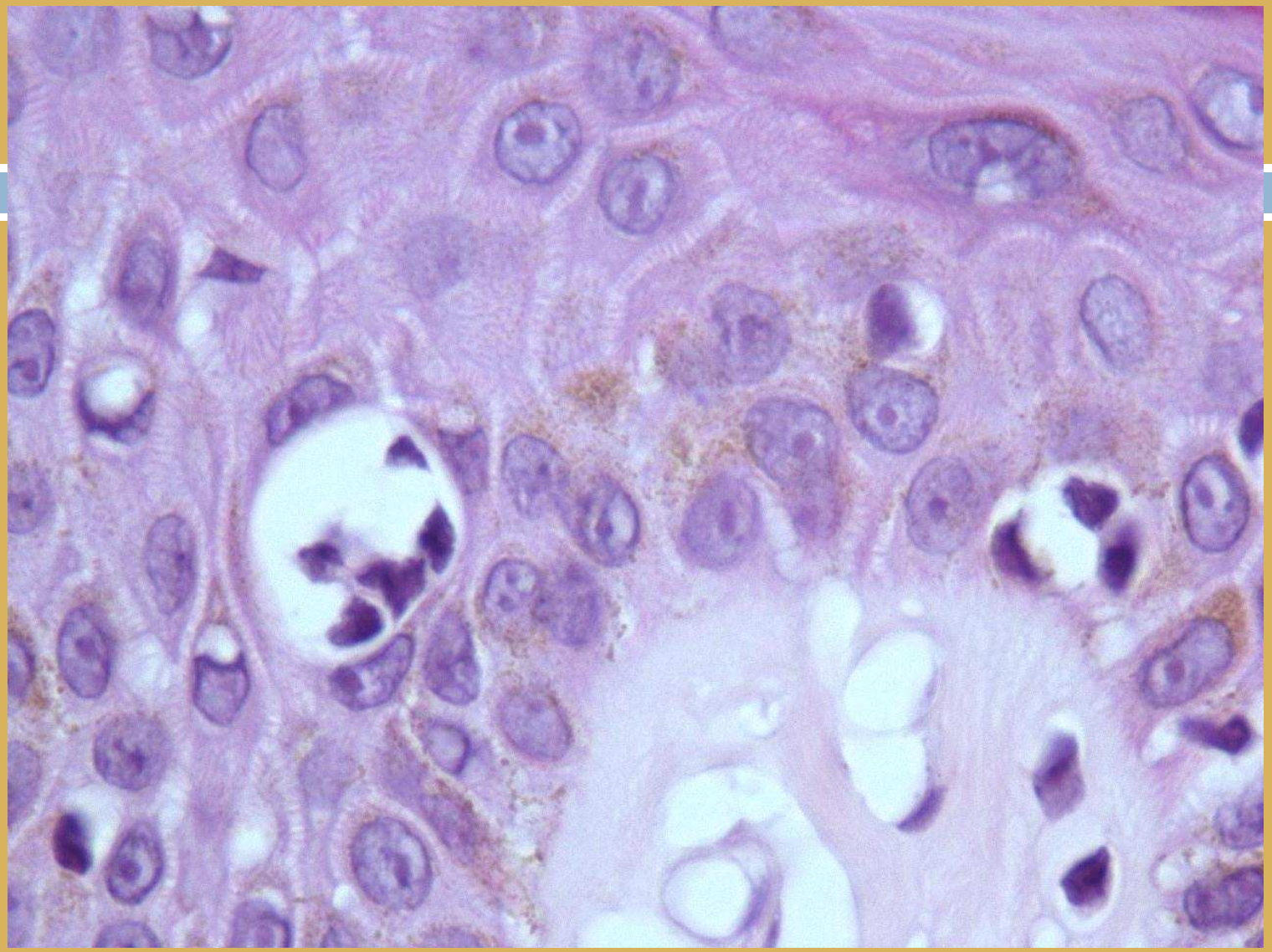
Infiltrado linfóide atípico epidermotrópico exibindo aspecto lentiginoso



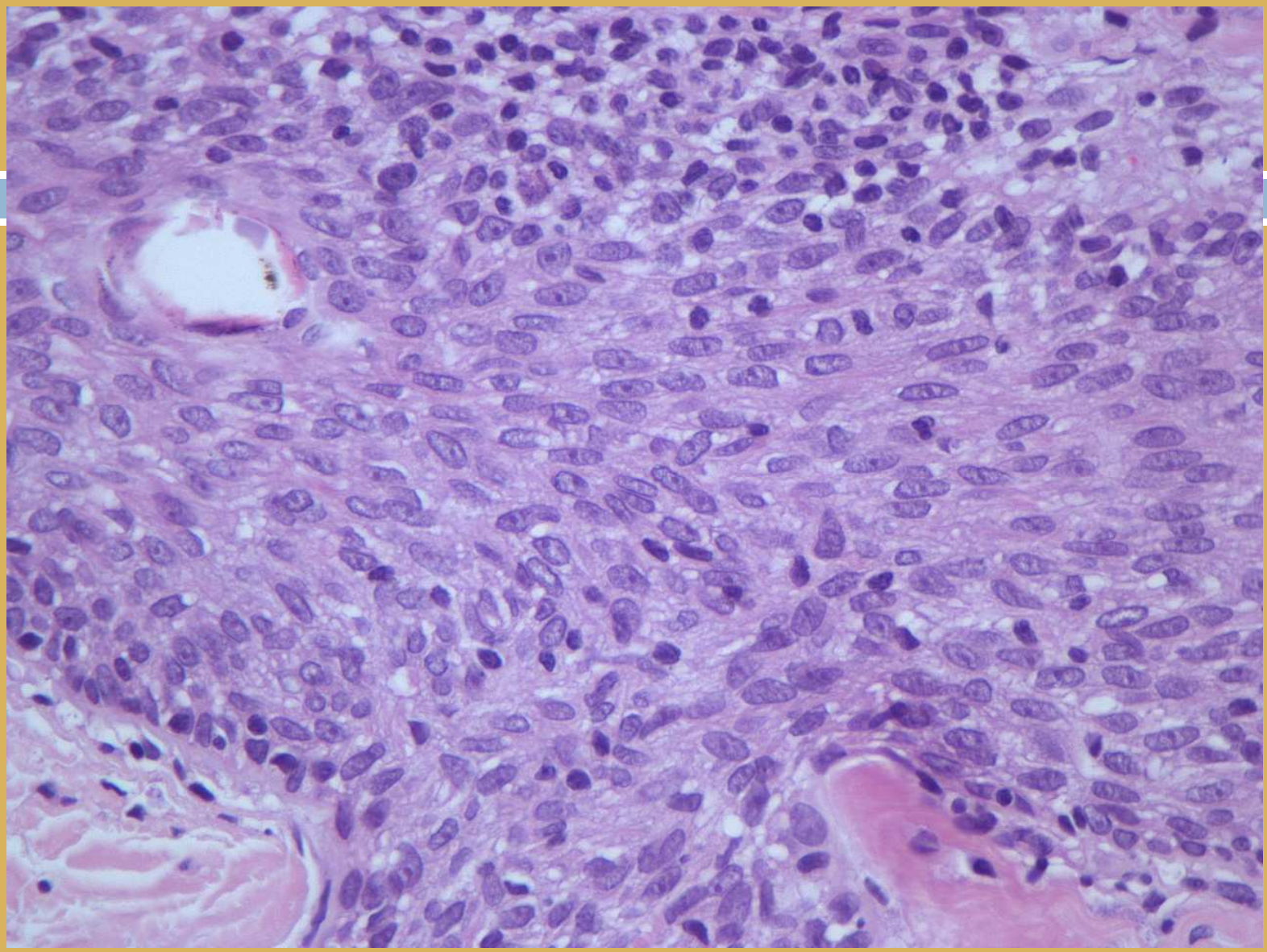
Infiltrado linfóide atípico epidermotrópico exibindo aspecto lentiginoso



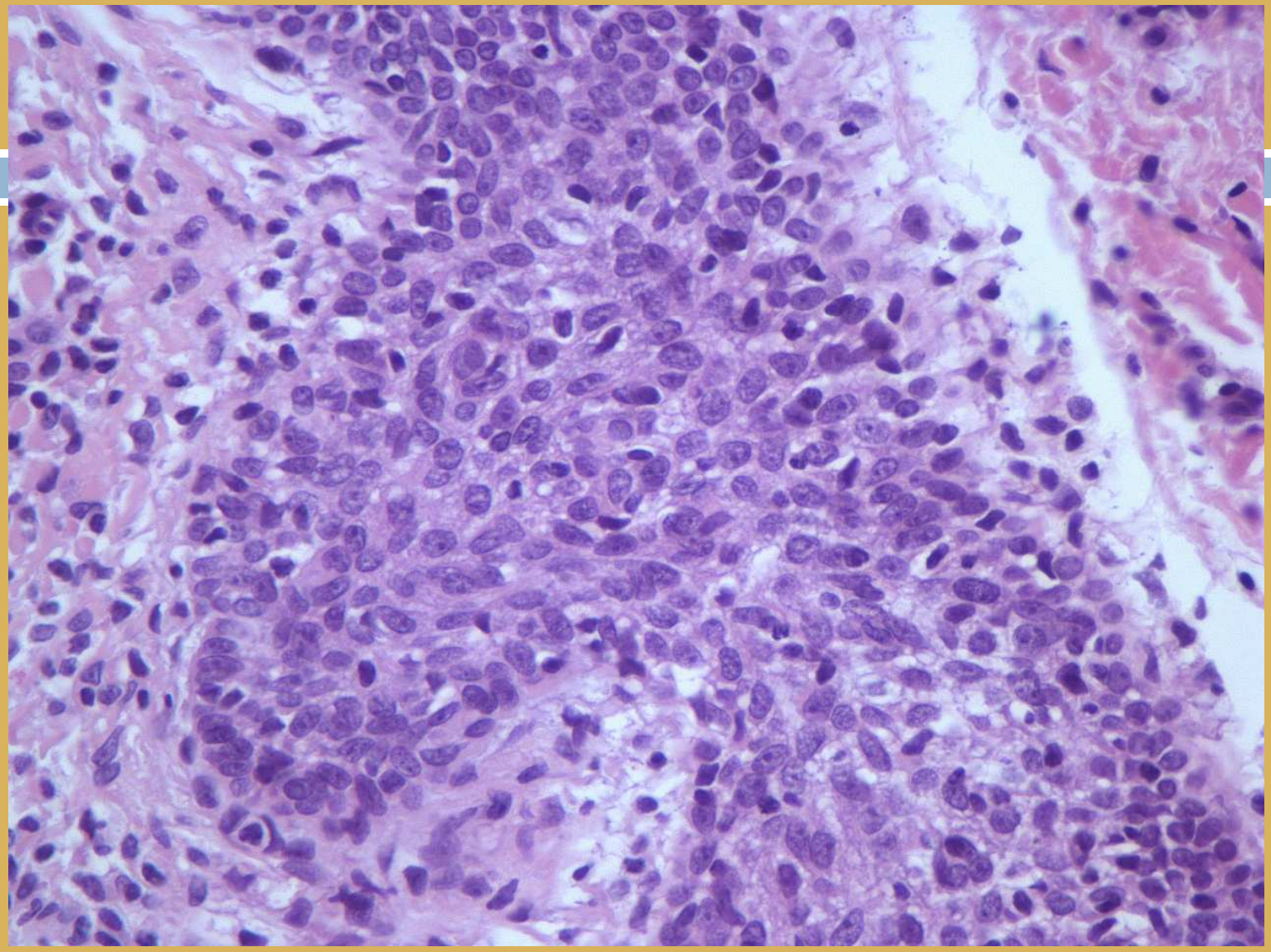
Infiltrado epidermotrópico de padrão pagetóide



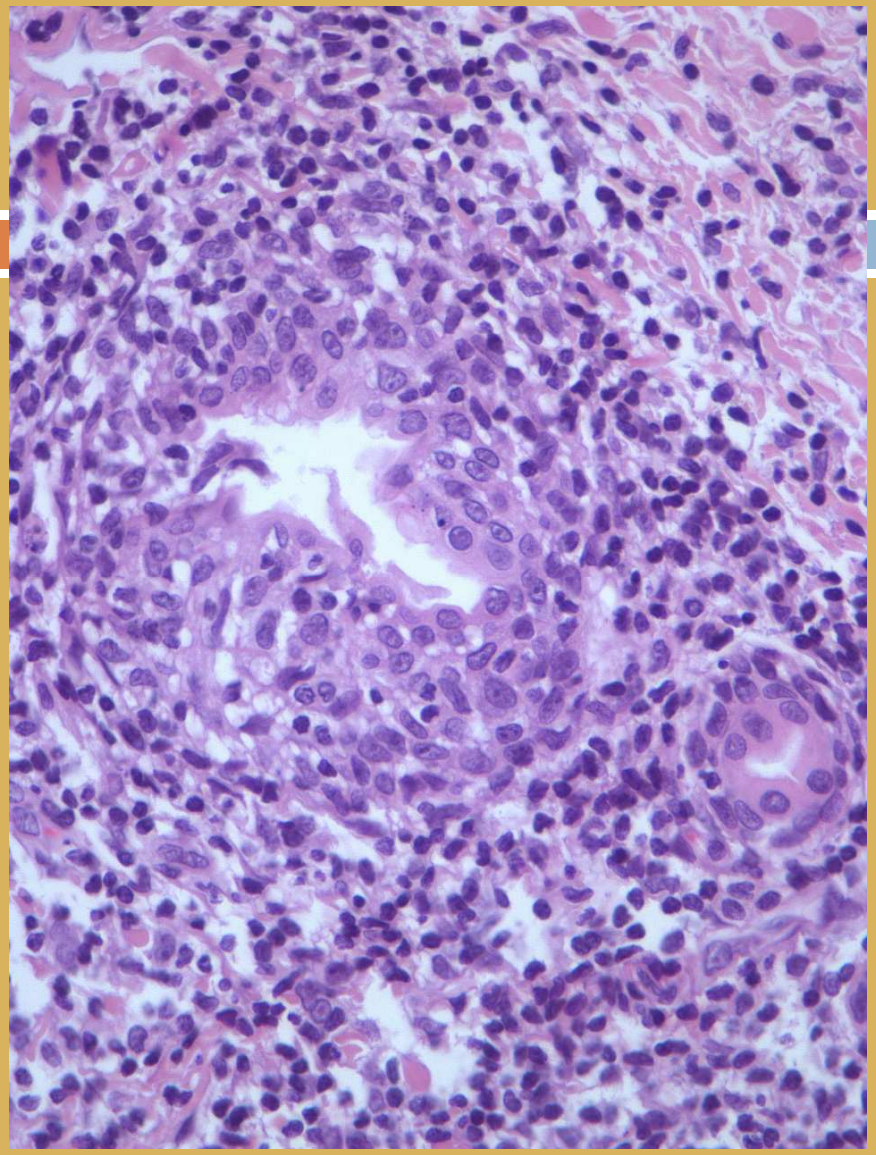
Agrupamentos intraepidérmicos (micro-abscessos de Pautrier) . Células com halo pronunciado

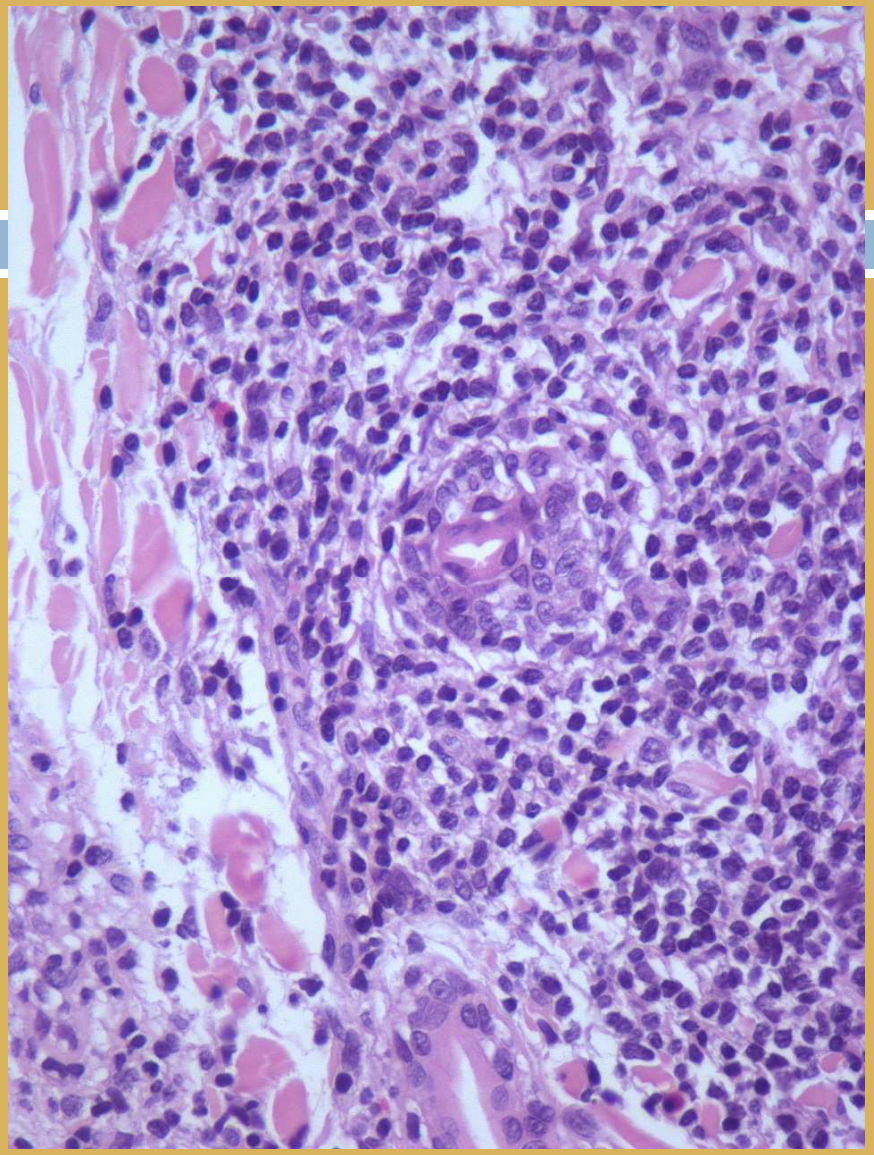


Comprometimento folicular por linfócitos atípicos

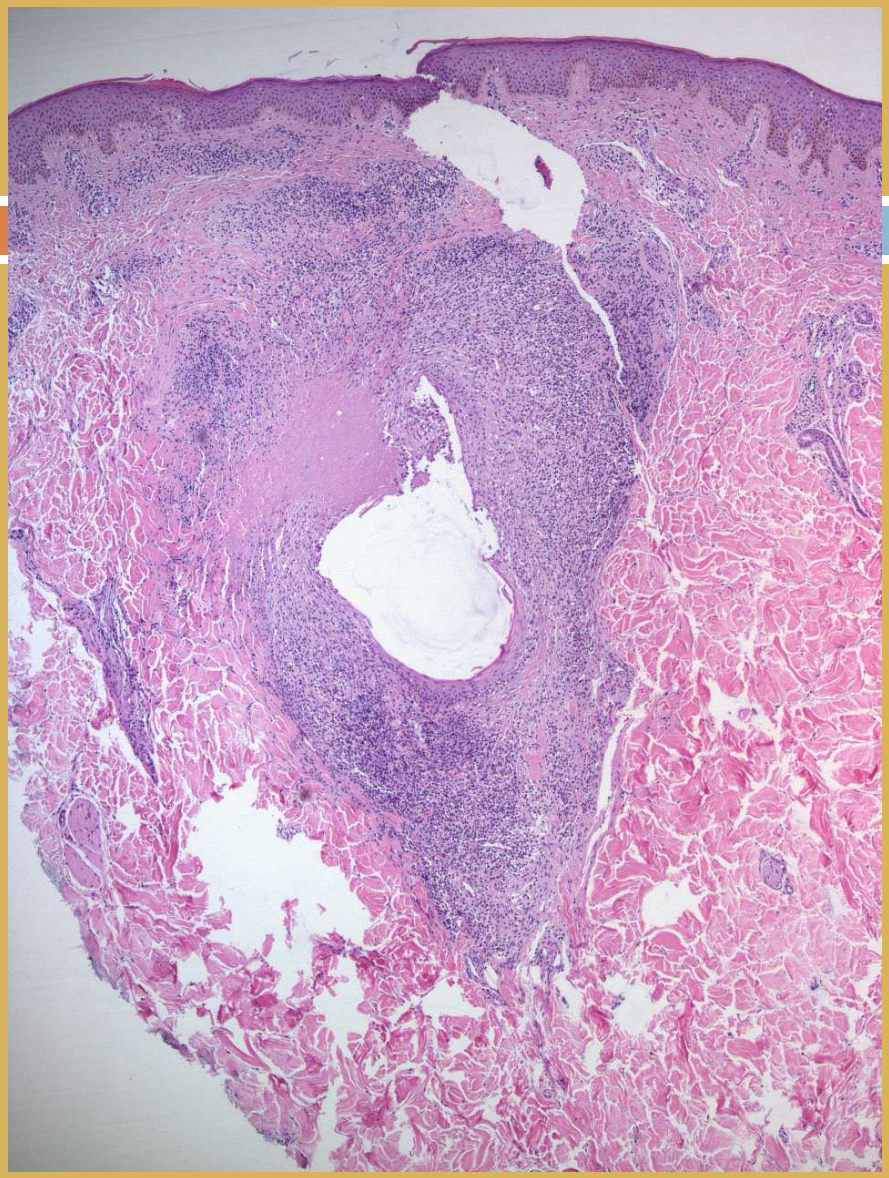


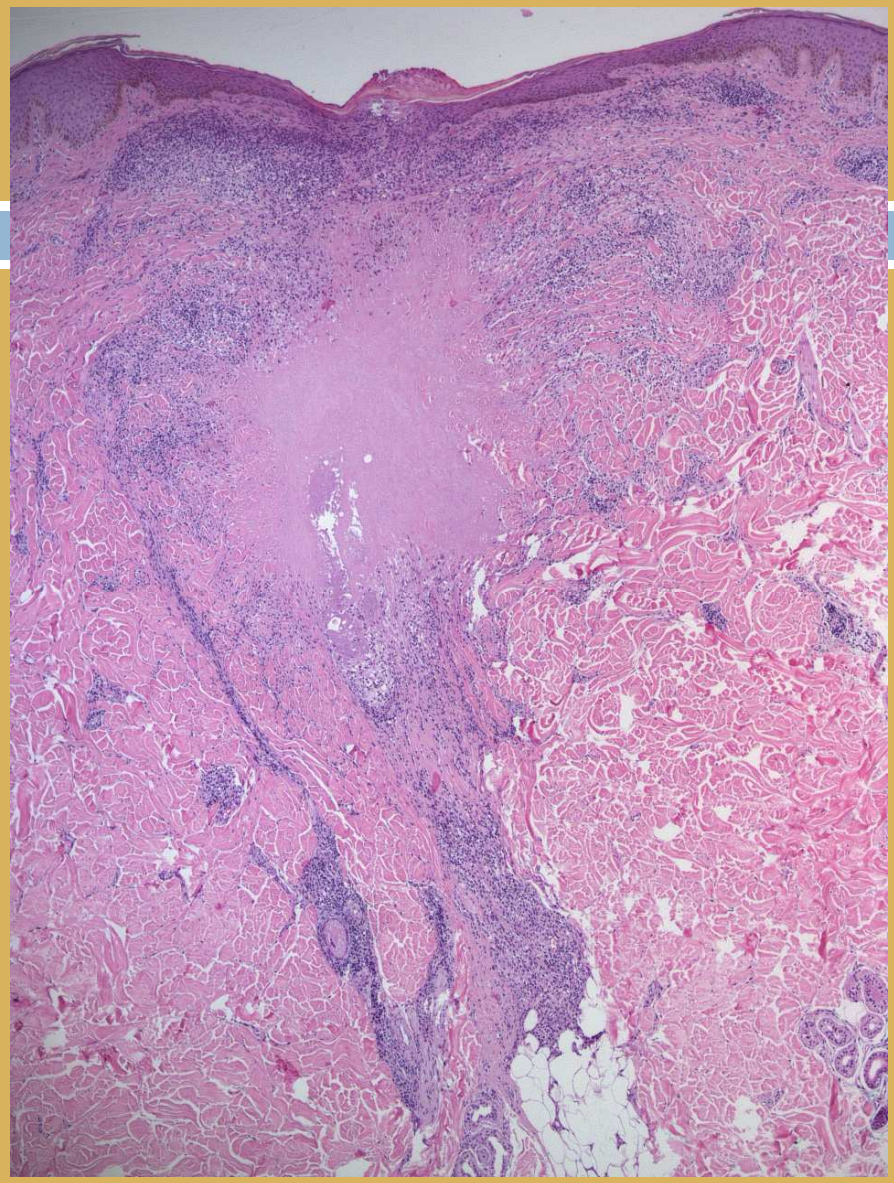
Comprometimento folicular por linfócitos atípicos



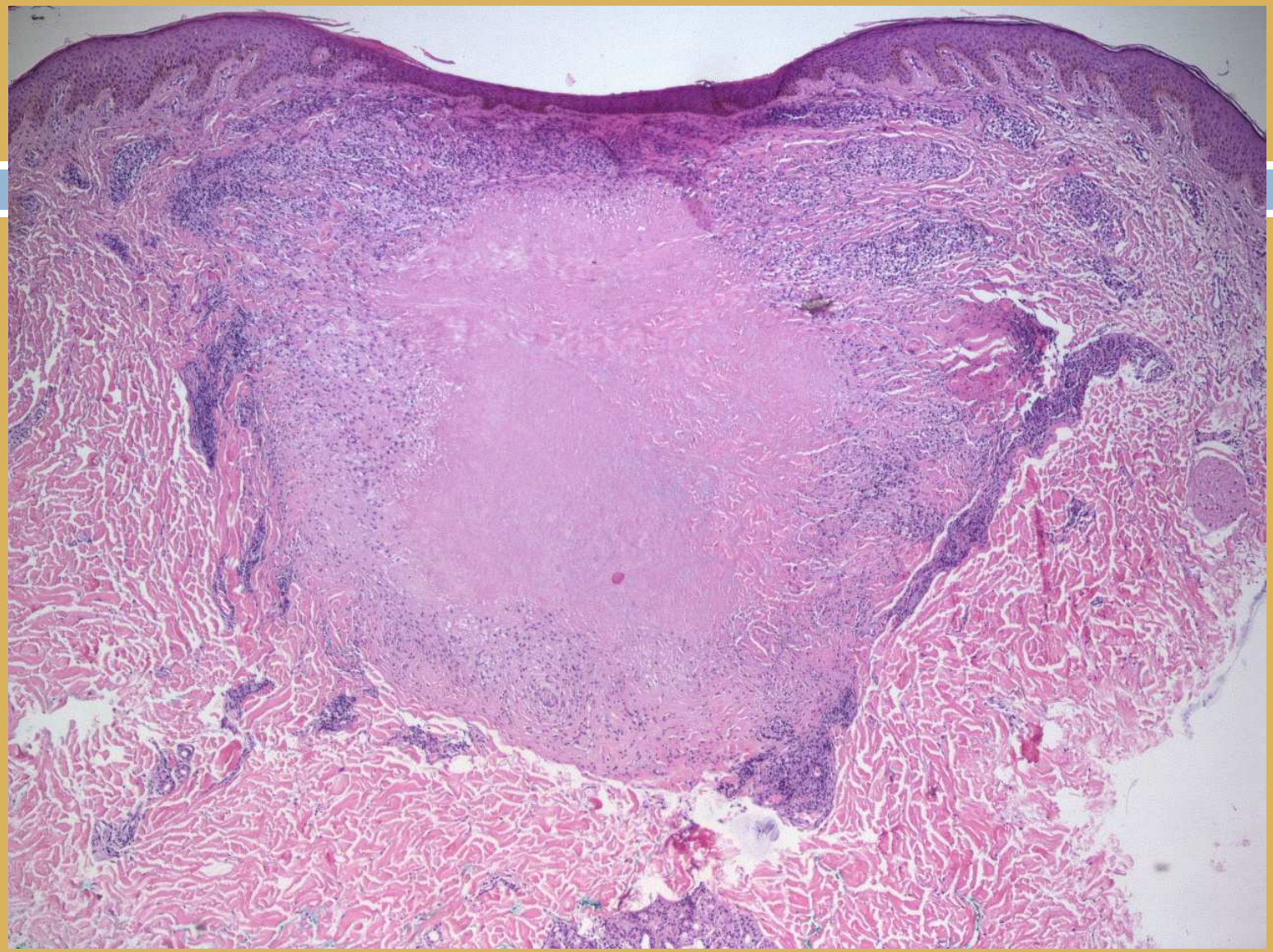


Comprometimento de glândulas sudoríparas

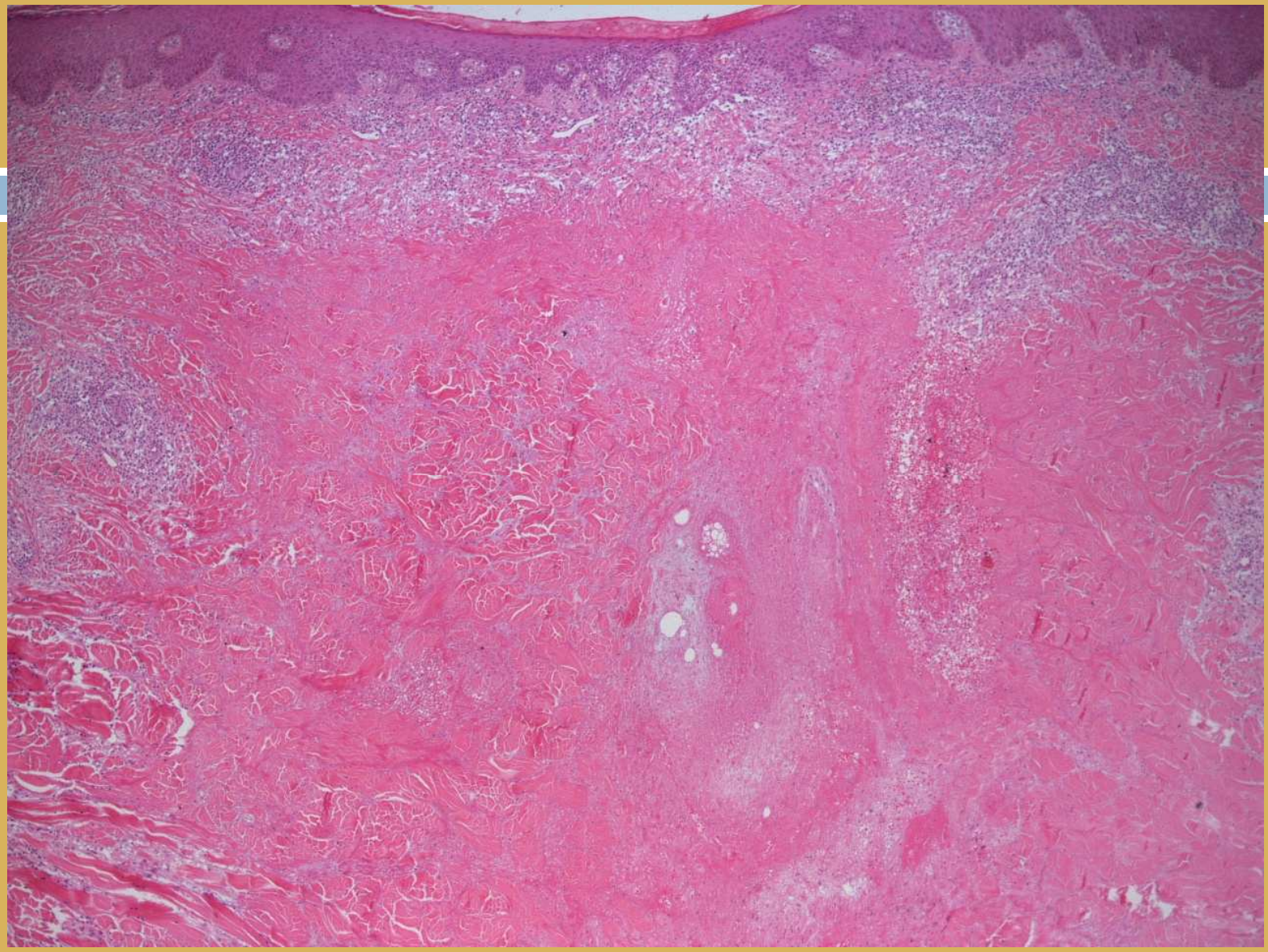




Infiltrado perifolicular exuberante, que se torna granulomatoso, com necrobiose.



Em algumas lesões, o aspecto granulomatoso predomina.



Lesão com extensa necrobiose

- **Aspectos interessantes do caso:**
  - Apresentação pouco usual de micose fungóide
    - Comprometimento folicular e anexial
    - Granulomas com necrobiose extensa
  - Dificuldade no diagnóstico diferencial com lesões inflamatórias
    - Granuloma anular, necrobiose lipoídica, foliculites
  - Alteração histológica secundária mais evidente que doença primária
  - Conclusão do diagnóstico por correlação com o quadro clínico

Micose fungóide

- Neoplasia originária em células T epidermotrópicas
- Infiltrado linfóide em faixa na derme papilar
- Fibrose grosseira associada
- Infiltrado linfóide em parte reativo, com eosinófilos, plasmócitos e monócitos
- Epidermotropismo e epiteliotropismo
  - Lentiginoso
  - Pagetóide
  - Agrupamentos (Micro-abescessos de Pautrier)

Micose fungóide

Tipos:

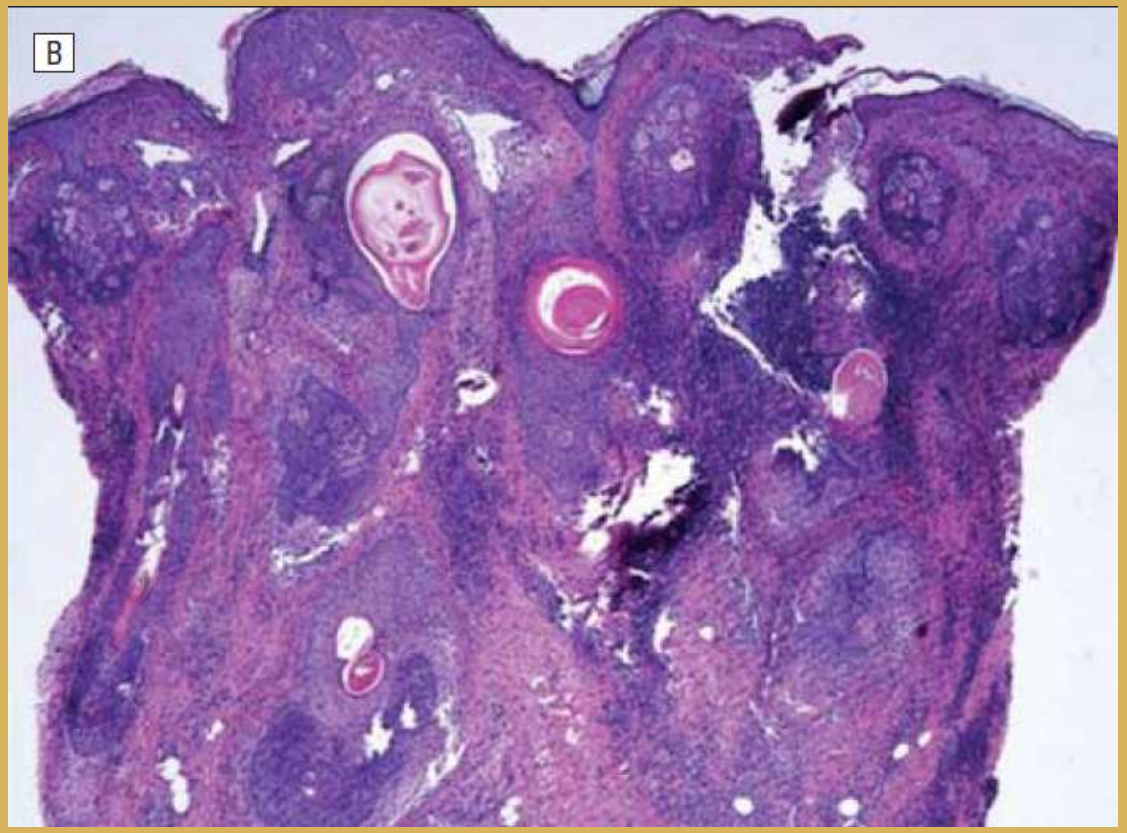
- **Anexotrópico**
- **Reticulose pagetóide solitária**
- **Granulomatosa**
- **Pele laxa granulomatosa**
- **Poiquiloderma atrófica vascular**
- **Psoriaseforme**
- **Bolhosa/vesicular**
- **Hipopigmentada**
- **Hiperpigmentada**
- **Palmo-plantar**
- **Verrucosa/Hipertrófica**
- **Acantose nigricante-like**
- **Pustulosa**
- **Ictiosiforme**

Folliculotropic Mycosis Fungoides

An Aggressive Variant of Cutaneous T-Cell Lymphoma

Pedram Gerami, MD; Steve Rosen, MD; Timothy Kuzel, MD; Susan L. Boone, MD; Joan Guitart, MD

Arch Dermatol. 2008;144(6):738-746



Micose fungóide

- **Follicular mycosis fungoides – A report of four Indian cases** Indian J Med Paediatr Oncol. 2009 Jul-Sep; 30(3): 108–112.

- **Folliculotropic mycosis fungoides and a leonine clinical appearance of the face** Dermatology Online Journal 14 (9): 6 Volume 14 Number 9September 2008

Micose fungóide - Diagnósticos diferenciais

- Dermatites reativas com infiltrado T
  - Pitiríase liquenóide crônica
  - Liquen escleroso inicial
  - Vitiligo inicial
  - Reticulóide actínico
- Farmacodermia
- Reação a picada de inseto
- Melanoma com regressão

Micose fungóide - Diagnósticos diferenciais

	Micose fungóide	Dermatite reativa
Arquitetura do infiltrado	Em faixa/liquenóide/nodular	Superficial perivascular
Padrão do infiltrado	Epidermotropismo com microabscessos	Exocitose - microgranulomas de céls Langerhans
Composição do infiltrado	Linfócitos atípicos	Infiltrado misto
Alterações epidérmicas	Hiperplasia sem espongiose* ou ceratinócitos apoptóticos	espongiose / ceratinócitos apoptóticos eventuais
Derme papilar	Fibrose grosseira	Fibrose em lesões crônicas
Citologia de linfócitos	Pequenos/médios, cerebriforme, halo perinuclear	Pequenos e regulares
IHQ	CD2+, CD3+, CD4+, CD5+, CD8- Perda de CD7. CD8+ eventual	CD4+ e CD8+ misto
Rearranjo de genes TCR	Clonal	Policlonal (raramente clonal)

Micose fungóide versus dermatites

- Critérios histológicos significantes

- Pautrier's microabscesses,
- Haloed lymphocytes *
- Exocytosis,
- Disproportionate epidermotropism,
- Epidermal lymphocytes larger than dermal lymphocytes,
- Hyperconvoluted (cerebriform nuclear contour) intraepidermal lymphocytes
- Lymphocytes aligned within the basal layer

Ryan A. Wilcox Cutaneous T-cell lymphoma: 2011 update on diagnosis, risk-stratification, and management

Am. J. Hematol. 86:929–948, 2011.

TABLE II. Diagnostic Criteria for Classic Mycosis Fungoides and Sézary Syndrome

Disorder	Diagnostic criteria	References
Mycosis fungoides (4 points required for diagnosis)	Clinical (2 points for 1 basic + 2 additional criteria; 1 point for 1 basic + 1 additional criteria) Basic: persistent and/or progressive patches/plaques Additional: non-sun exposed location, variation in size/shape, poikiloderma Histopathologic (2 points for 1 basic + 2 additional criteria; 1 point for 1 basic + 1 additional criteria) Basic: superficial lymphoid infiltrate Additional: epidermotropism without spongiosis, lymphoid atypia (cells with large, cerebriform nuclei) Molecular biological (1 point) Clonal TCR gene rearrangement Immunopathologic (1 point for ≥1 criteria) <50% $CD2^+$, $CD3^+$ and/or $CD5^+$ T cells <10% $CD7^+$ T cells Epidermal/dermal discordance of CD2, CD3, CD5 or CD7	[116]
Sézary syndrome	Clonal rearrangement of the TCR (by Southern or PCR) Absolute Sézary count ≥ 1,000/μl Or 1 of the following if Sézary count not able to be used: Increased $CD4^+$ or $CD3^+$ T cells with CD4/CD8 ratio ≥10 Abnormal immunophenotype: $CD4^+CD7^-$ ratio ≥40% or $CD4^+CD26^-$ ratio ≥30%	[117]

Ryan A. Wilcox Cutaneous T-cell lymphoma: 2011 update on diagnosis, risk-stratification, and management

Am. J. Hematol. 86:929–948, 2011.

Feature (with grading)	MF-17	Inflm-33	*P* value	Sensitivity	Specificity	y
Pattern: Spongiotic lichenoid	2	1	0.218			
Spongiotic psoriasiform	6	16	0.373			
Lichenoid psoriasiform	4	3	0.163			
Spon-pso-lichenoid	1	1	100			
Compact orthokeratosis	11	25	0.4			
Elongated parakeratosis	7	11	0.5			
Spongiosis (none/<10%/10-50%/>50%)	15	22	0.1			
Epidermotropism (40 x - none/1-5/6-10/>10)	17	4	0	100	87	
Lymphocyte tagging (absent/focal/extensive)	16	4	0	96	87	
Pagetoid spread (absent/present)	3	2	0.196			
Pautrier microabscess (absent/present)	7	1	0	41	96	
Haloed lymphocytes (100 x - none/1-5/6-10/>10)	10	1	0	58	96	
Disproportionate epidermotropism(absent/present)	14	2	0	82	93	
Larger epidermal lymphocytes(100 x - none/1-5/6-10/>10)	12	1	0	70	96	
Convoluted lymphocytes none/focal/extensive)	8	0	0	47	100	
Mitoses (per 10 hpf - none/1-5/6-10/>10)	1	0	100			
Interface dermatitis (none/focal/extensive)	1	3	0.6			
Wiry collagen (none/focal/extensive)	9	3	0.001	52	90	
Dermal edema (none/focal/extensive)	0	12	0.004	100	100	
Eccrine infiltration (40 x - none/1-5/6-10/>10)	3	0	0.013	17	100	
Mucin within follicle (none/focal/extensive)	3	0	0.013	17	100	
Follicular infiltration (40 x - none/1-5/6-10/>10)	6	1	0.002	35	96	
Involvement of papillary+reticular dermis	8	5	0.015	47	84	
Monomorphous infiltrate	15	18	0.017	88	45	
Eosinophils (40 x - none/focal/extensive)	4	10	0.613			
Plasma cells (40 x- none/1-5/6-10/>10)	1	3	0.692			
Extravasated RBCs (none/focal/extensive)	2	4	0.971			
Melanophages (none/focal/extensive)	4	6	0.654			
Atypia of dermal lymphocytes (none/focal/extensive)	10	1	0	58	96	
Stuffed dermis (none/focal/extensive)	7	6	0.079			

Inchara YK, Rajalakshmi T.
Early mycosis fungoides vs. inflammatory mimics: How reliable is histology?.
Indian J Dermatol Venereol Leprol 2008;74:462-6

Inchara YK, Rajalakshmi T.
Early mycosis fungoides vs. inflammatory mimics: How reliable is histology?.
Indian J Dermatol Venereol Leprol 2008;74:462-6

- ***Spongiosis**:* presence of widened intercellular spaces with stretched intercellular bridges with/without formation of microvesicles containing plasma.
- ***Epidermotropism**:* lymphocytes disposed as solitary units within the basal layer of the epidermis in foci.
- ***Tagging:*** four or more lymphoid cells closely opposed to basal keratinocytes in a linear arrangement.
- ***Pagetoid spread**:* epidermotropic lymphoid cells occupying the entire thickness of the epidermis.
- ***Pautrier's microabscess**:* collections of 4 or more lymphoid cells in the epidermis with no significant cytopathic changes in the surrounding keratinocytes.
- ***Haloed lymphocytes**:* single epidermotropic lymphocytes having no tendency to coalesce, separated from the surrounding keratinocytes by clear spaces.
- ***Disproportionate epidermotropism**:* epidermotropism as a function of spongiosis. Lymphocytes scattered in the epidermis in association with little or barely detectable spongiosis.
- ***Papillary dermal fibrosis (wiry collagen):*** thickened bundles of collagen in haphazard array in the papillary dermis.
- ***Monomorphous dermal infiltrate**:* cellular infiltrate composed of more than 75% of lymphoid cells.
- ***Atypia of dermal lymphocytes**:* lymphocytes showing high nuclear-cytoplasmic ratio with irregular, folded nuclear margins.
- ***Stuffed dermis**:* dermal papillae packed completely with lymphoid cells.