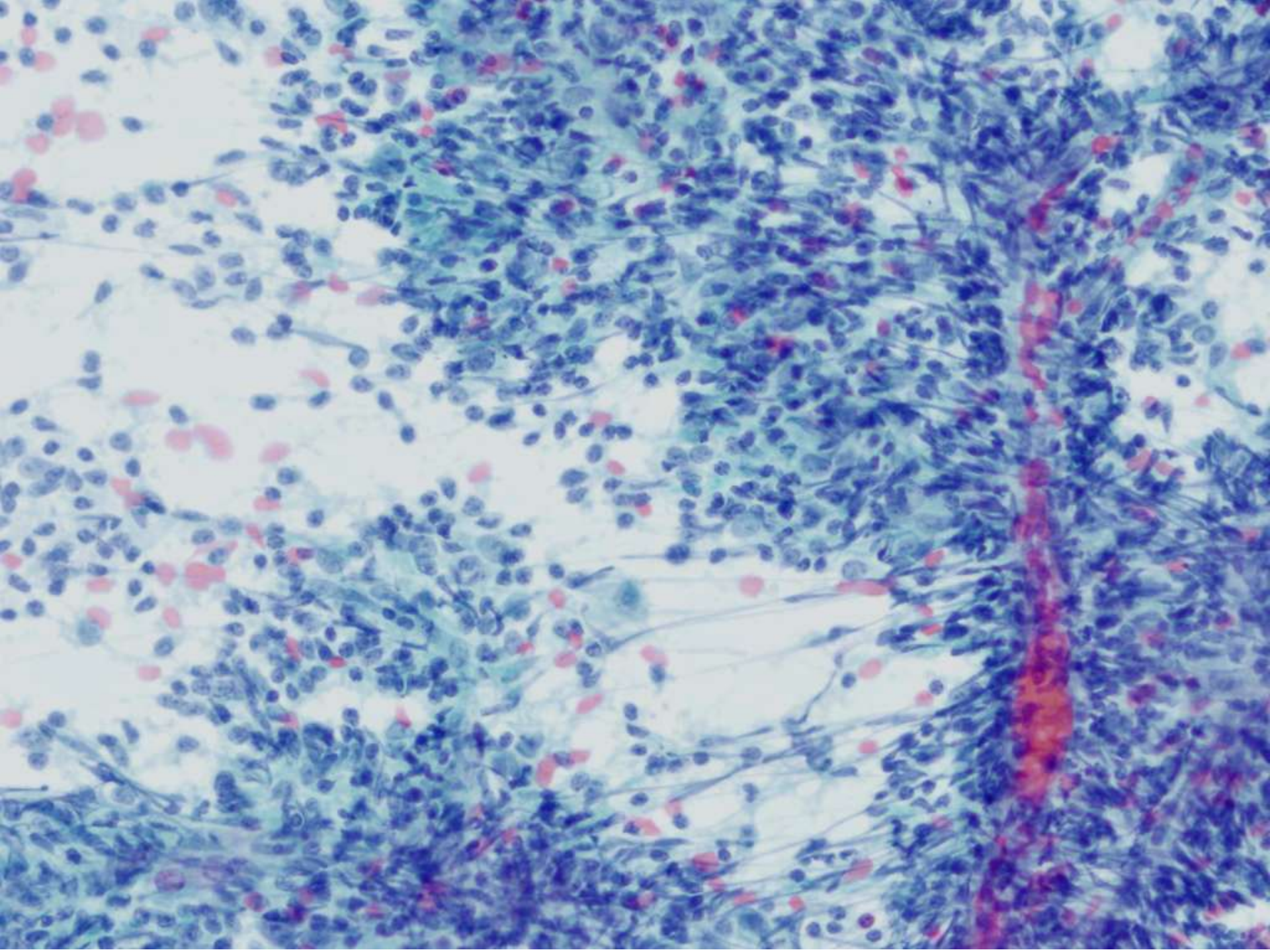
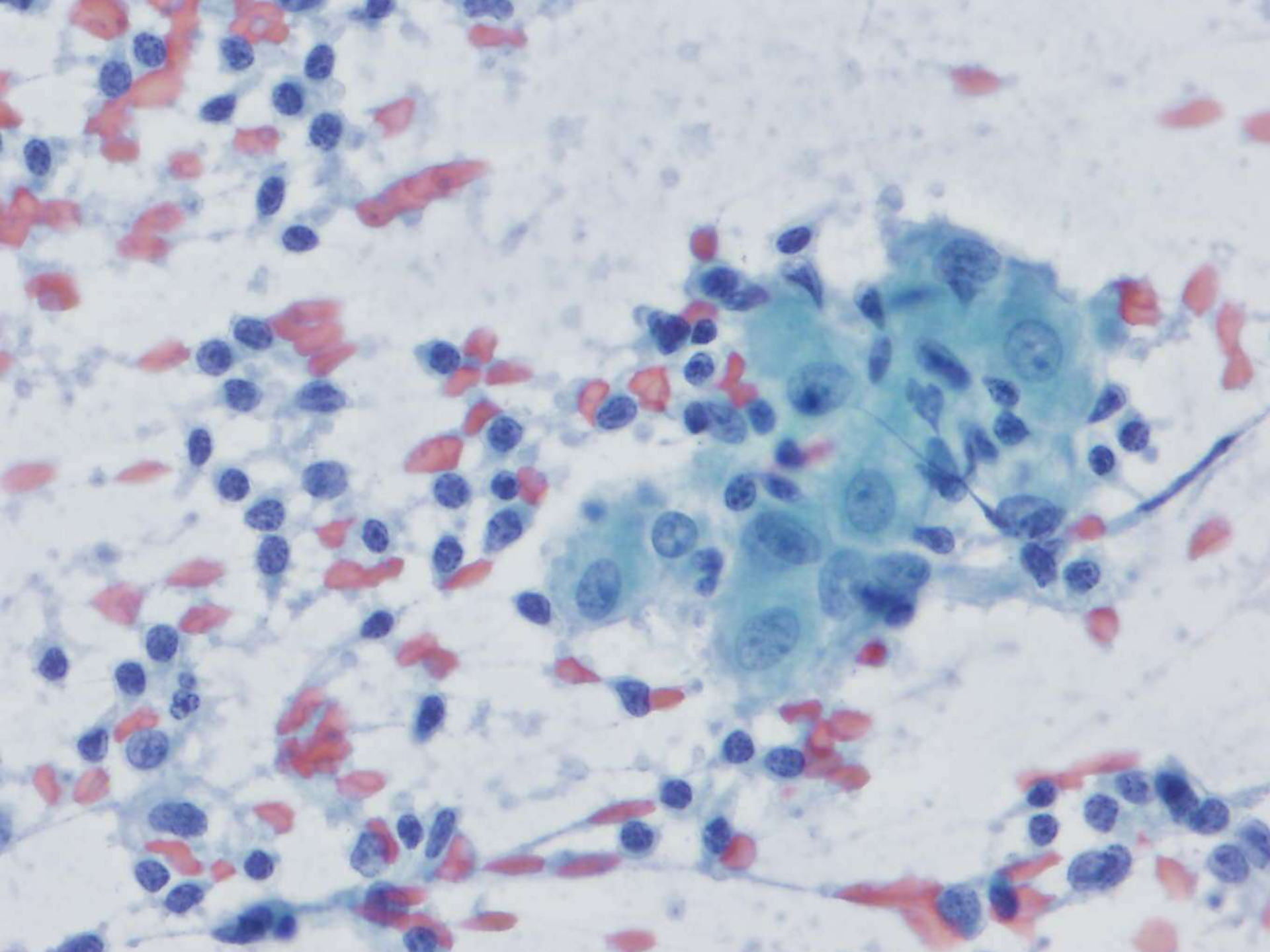
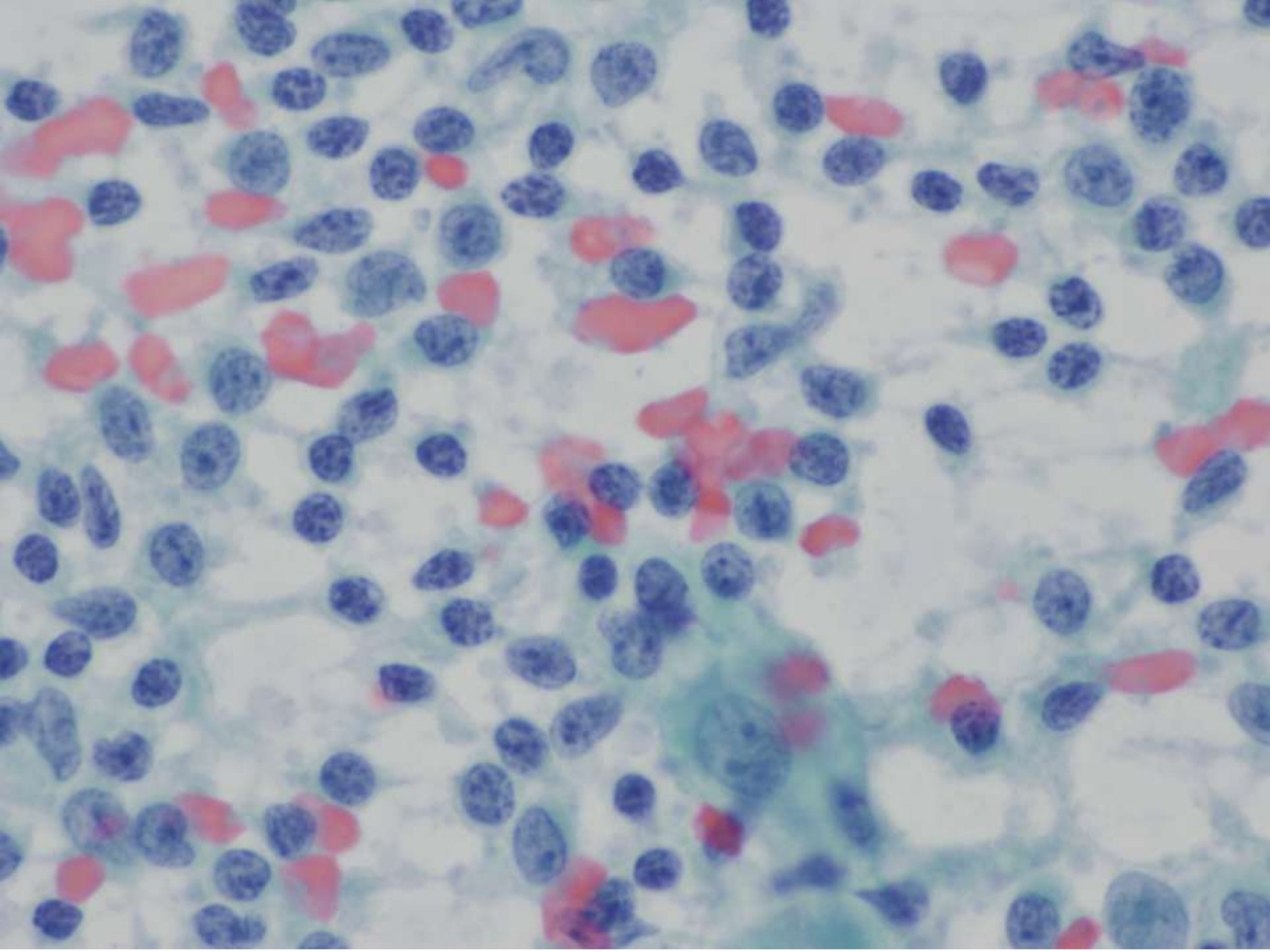

Hombre de 84 años que ha residido 20 años en país centroamericano. Adenopatía supraclavicular derecha de 2 cm. Se realiza PAAF.

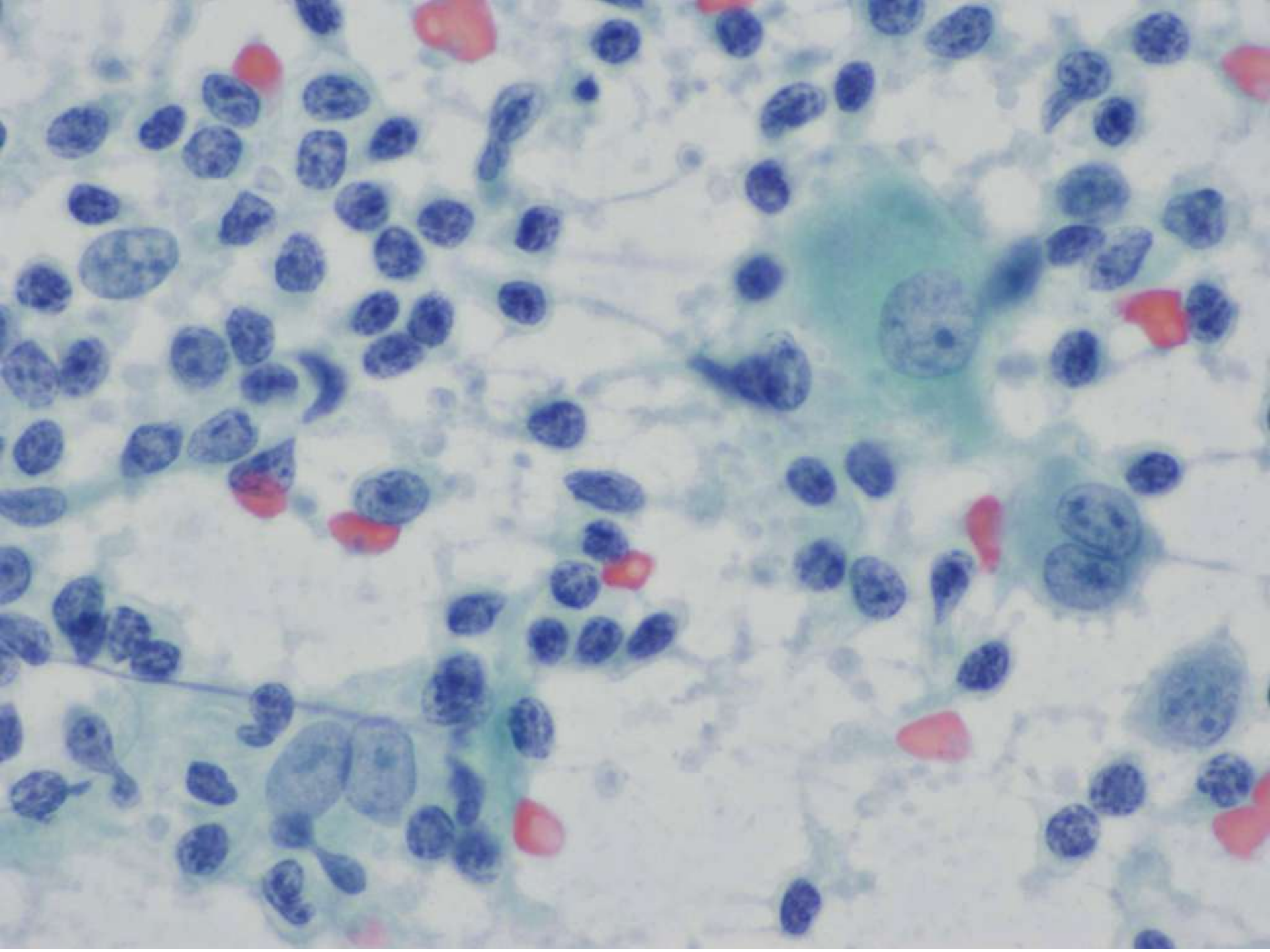
Javier Esquivias

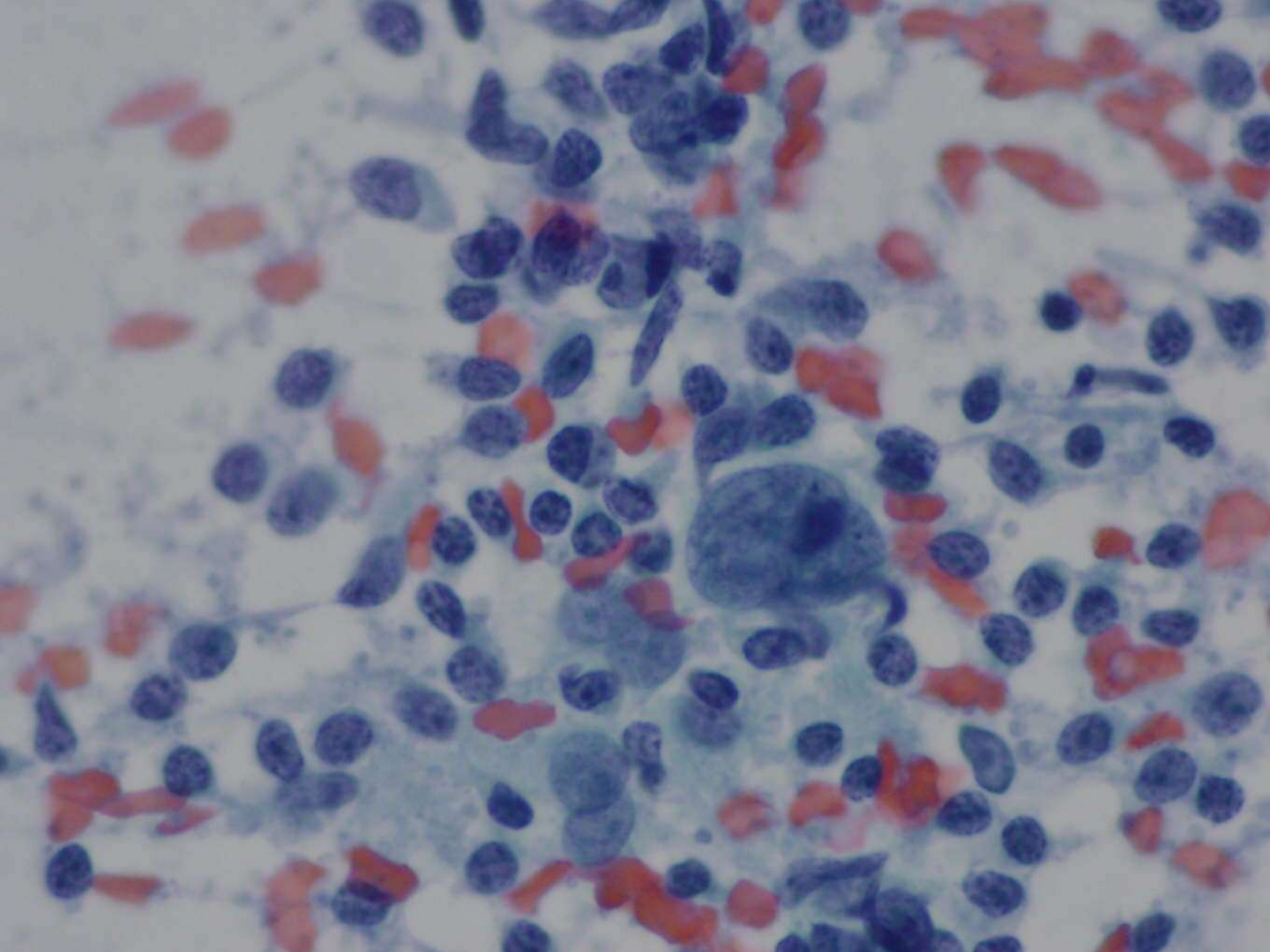
Hospital Clínico San Cecilio. Granada



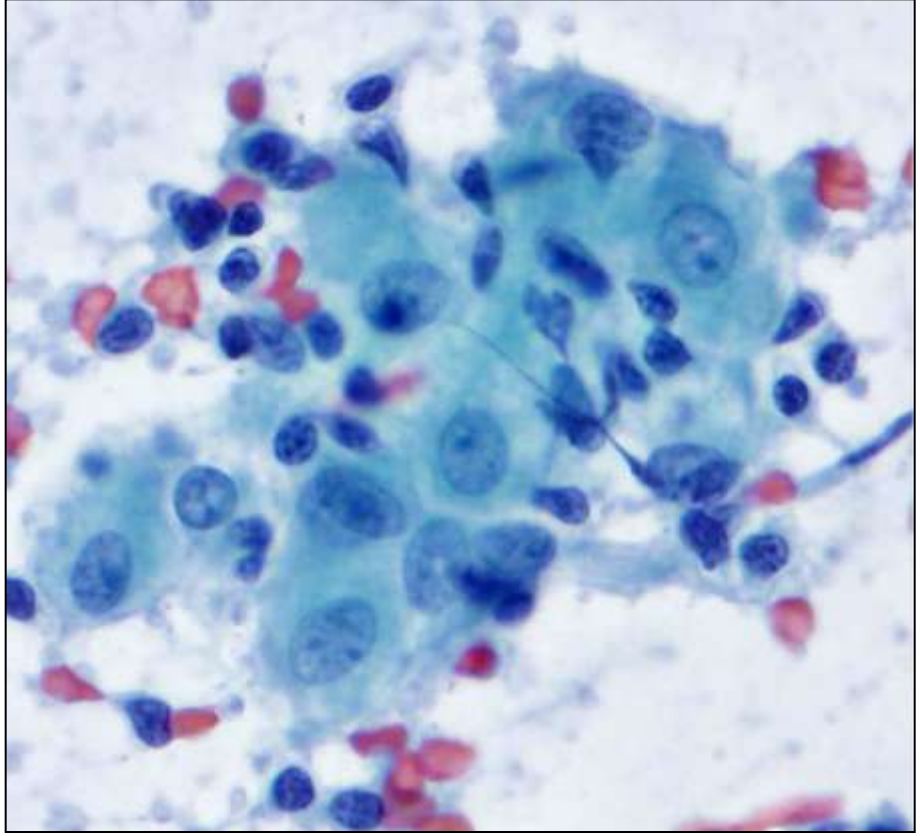


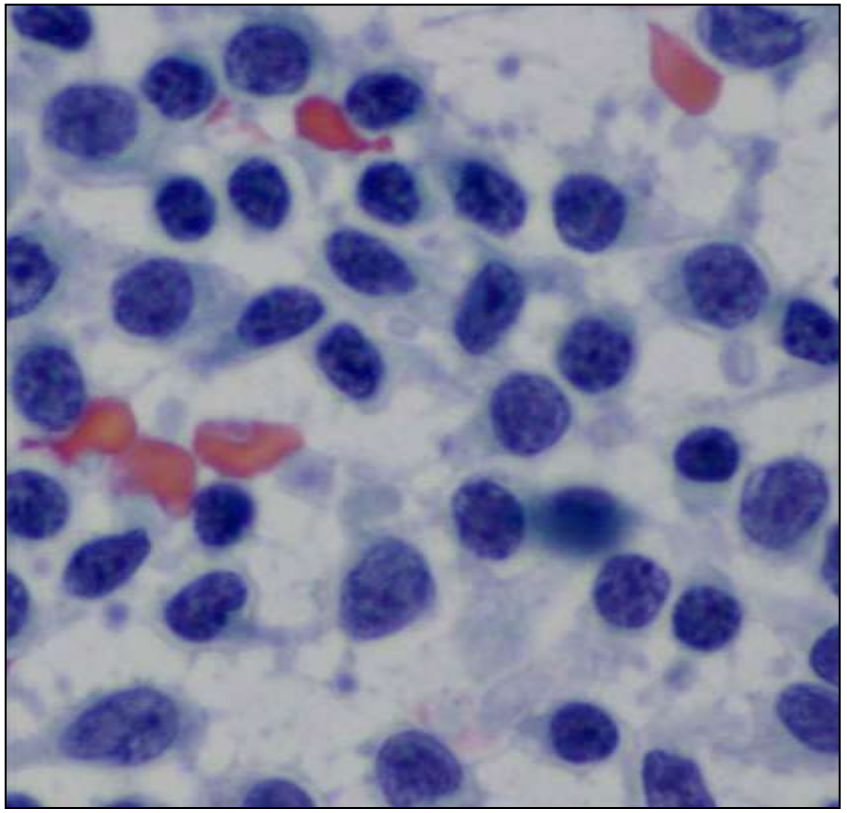


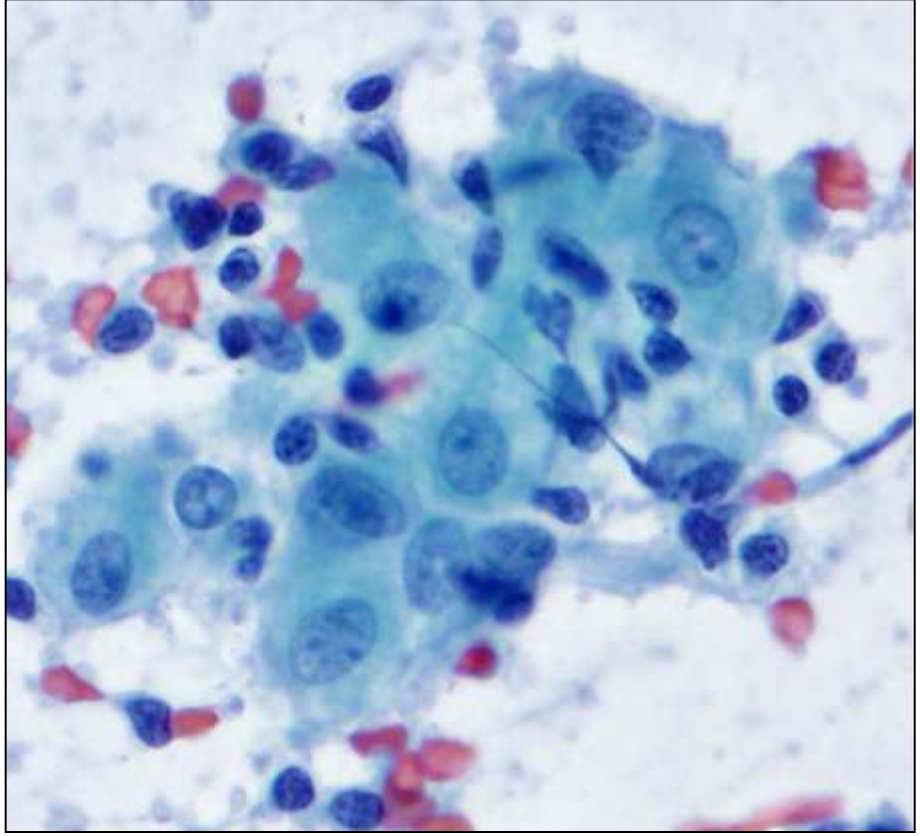


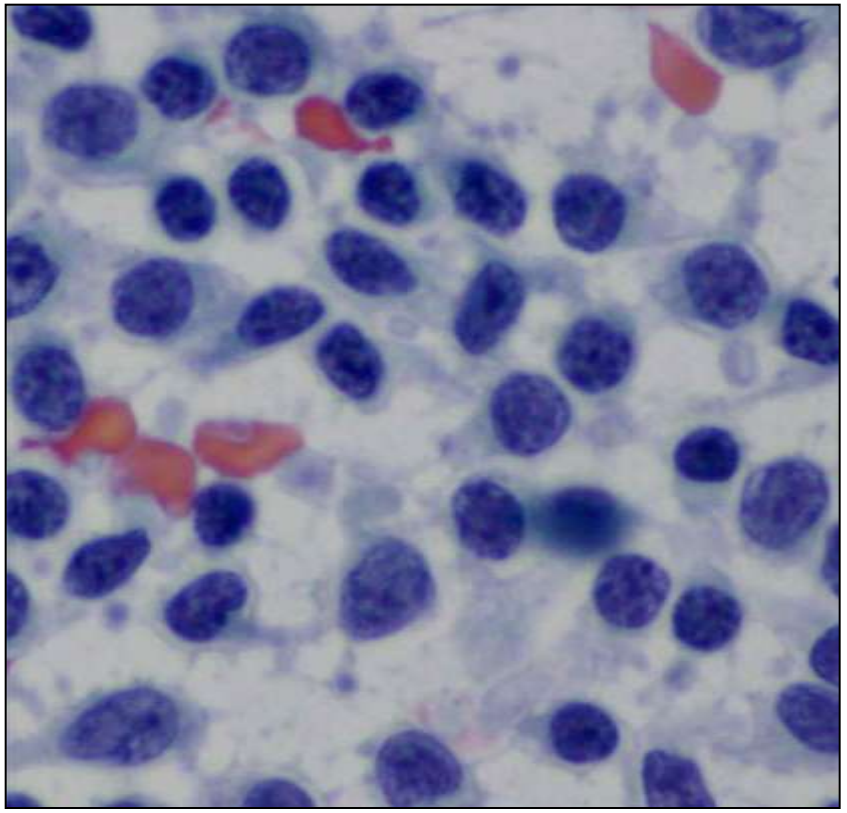


1. Linfoma de Hodgkin
2. Linfadenitis granulomatosa
3. Timoma ectópico
4. Linfoma no Hodgkin









**CITOMETRÍA DE FLUJO:**

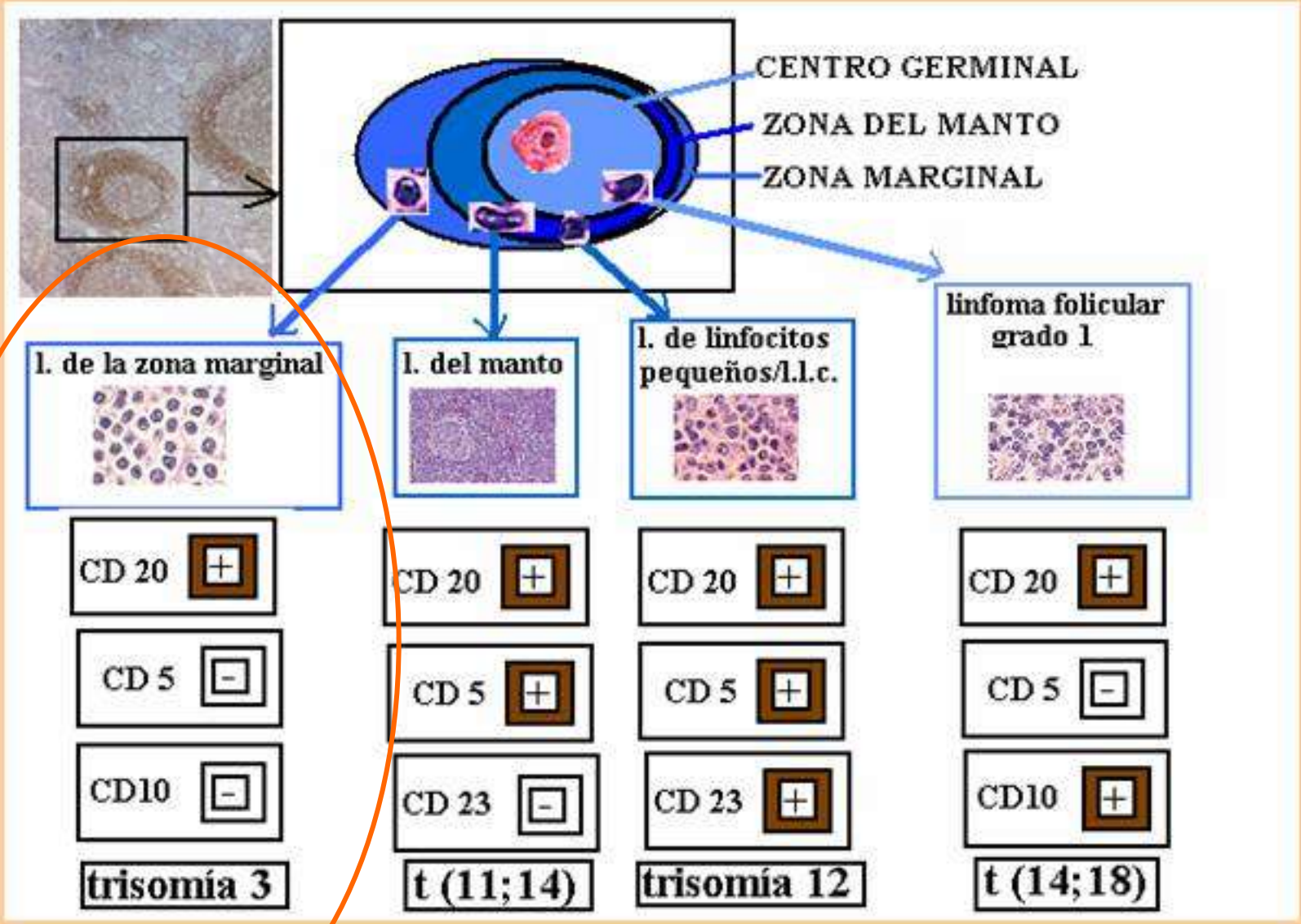
Linfocitos T: 38%; CD4: 32%; CD8:9%

Linfocitos B: 60%

CD19+, CD5- , CD23- , CD10- ,CD22+ , CD20+ , CD38- ,

IgS + monoclonal Lambda

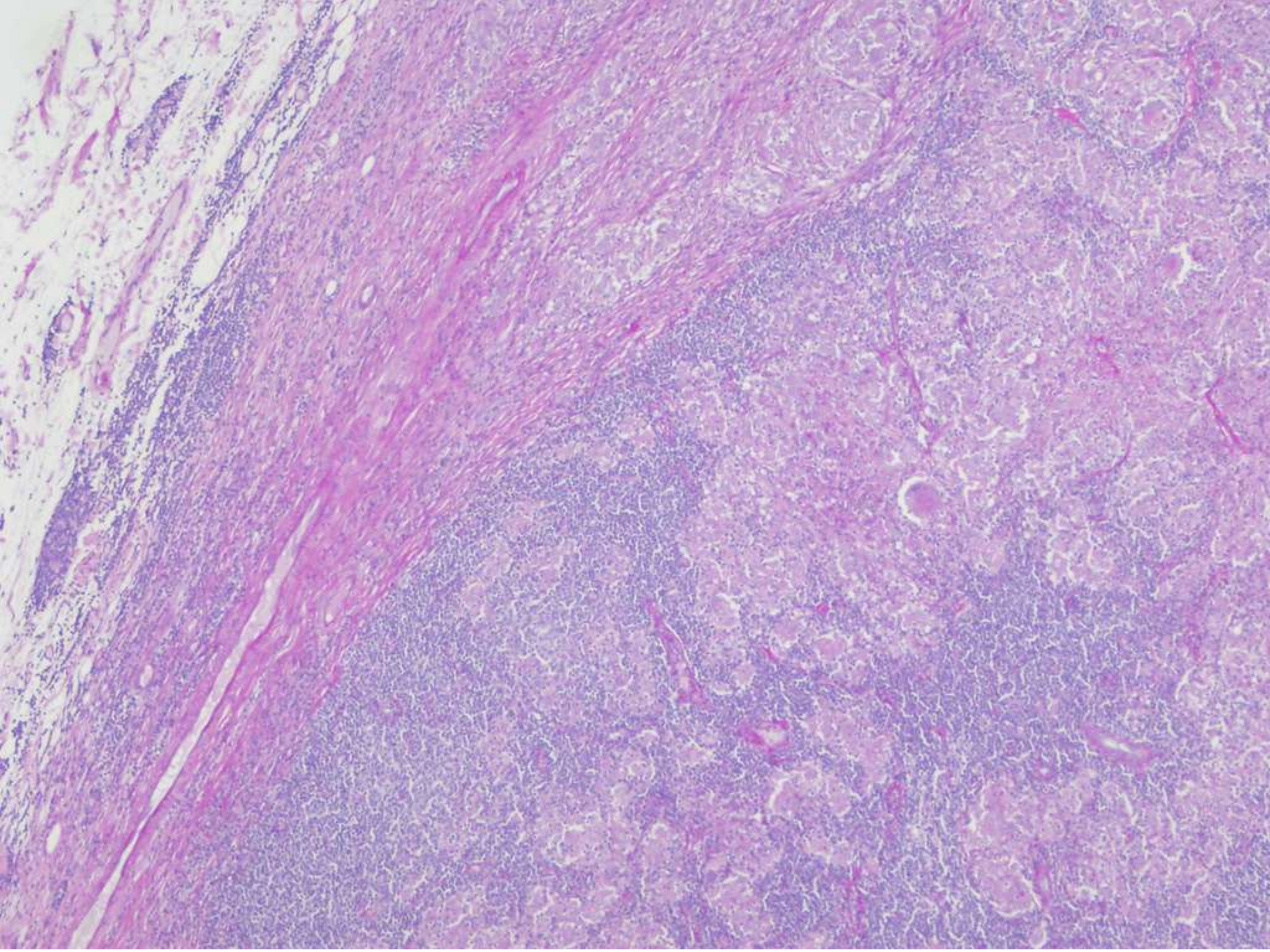
# Células pequeñas CD20+ CD3- : Diagnóstico diferencial

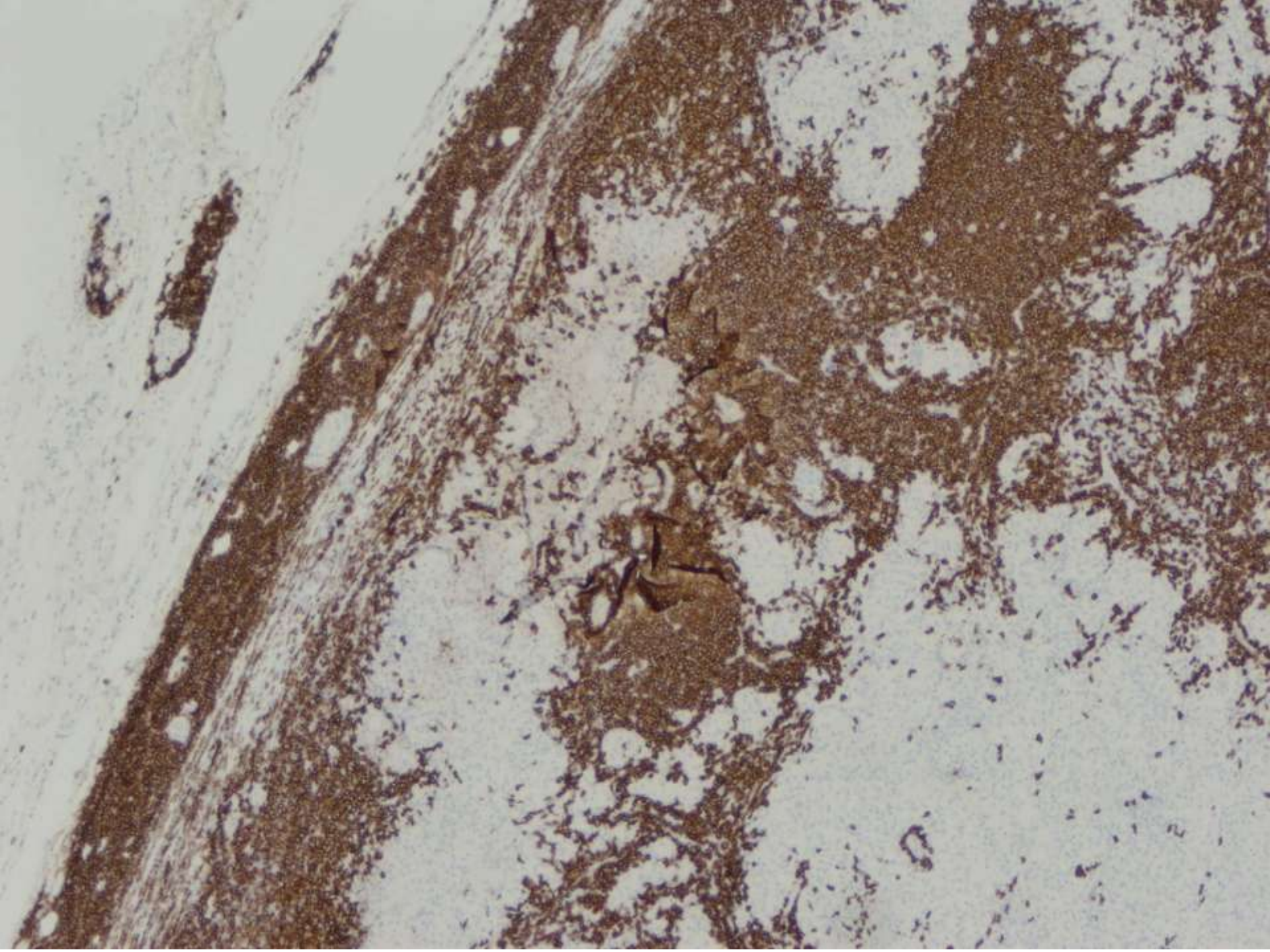


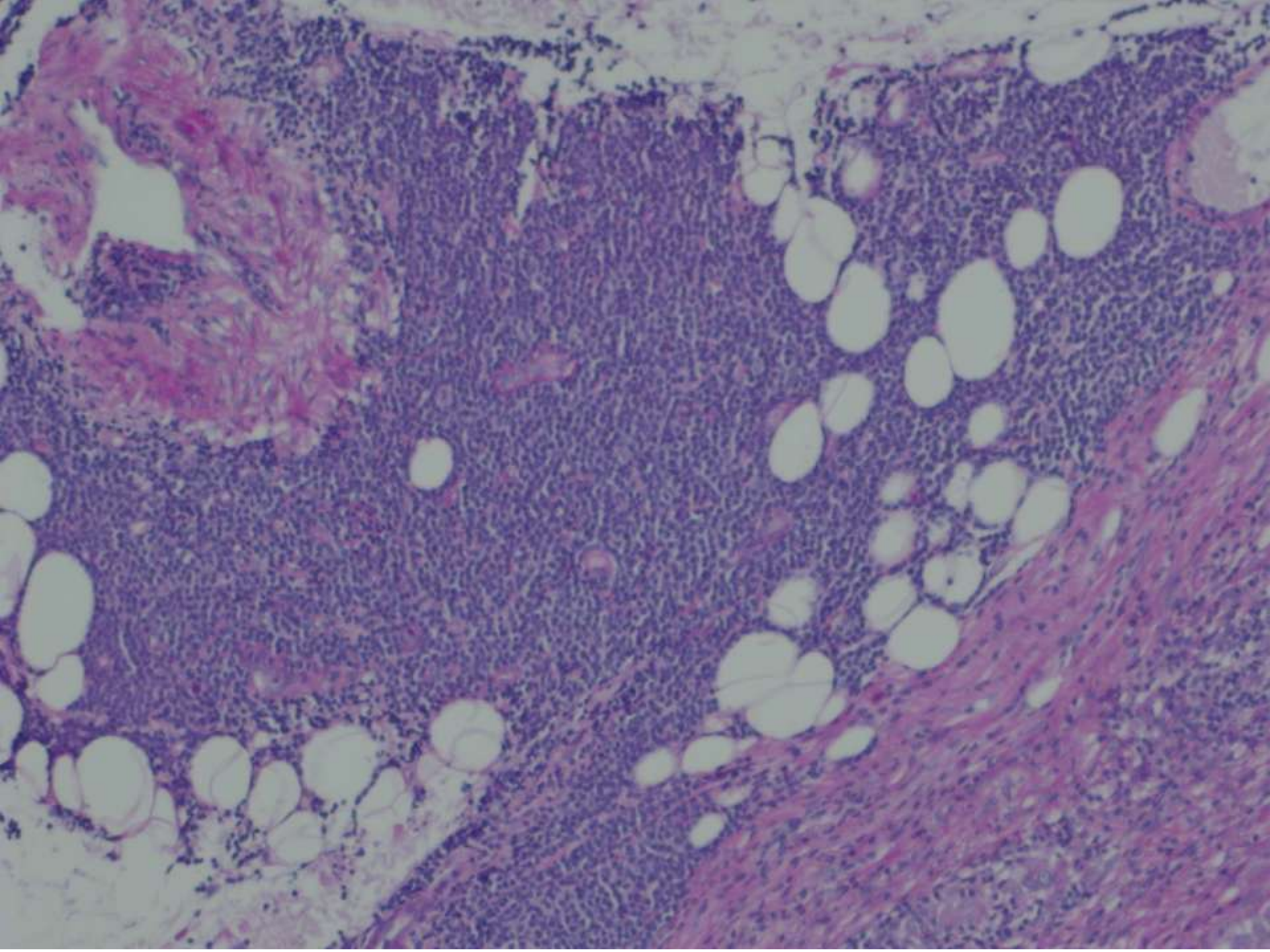
LINFOMA B DE BAJA TASA DE PROLIFERACION

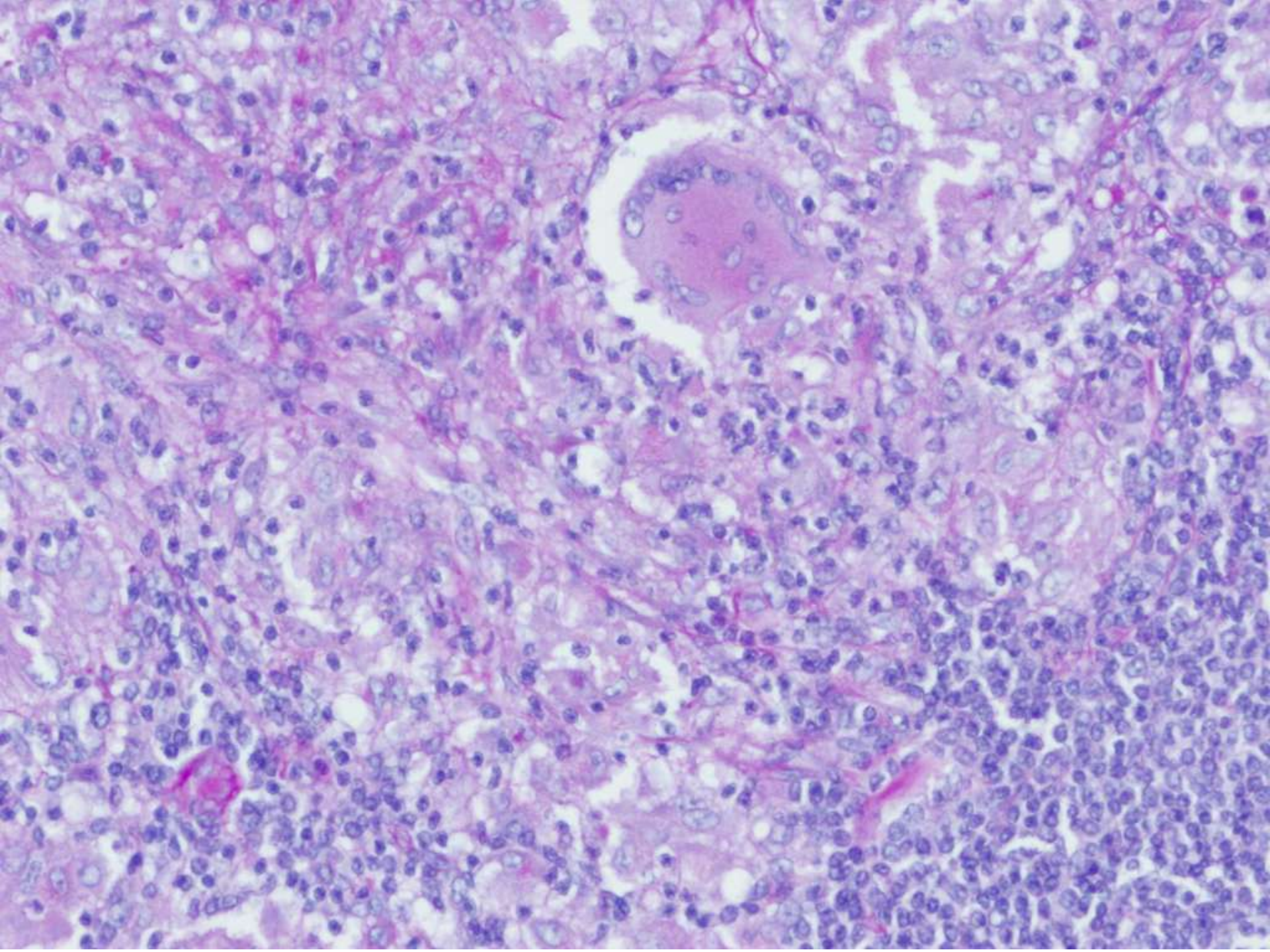
+

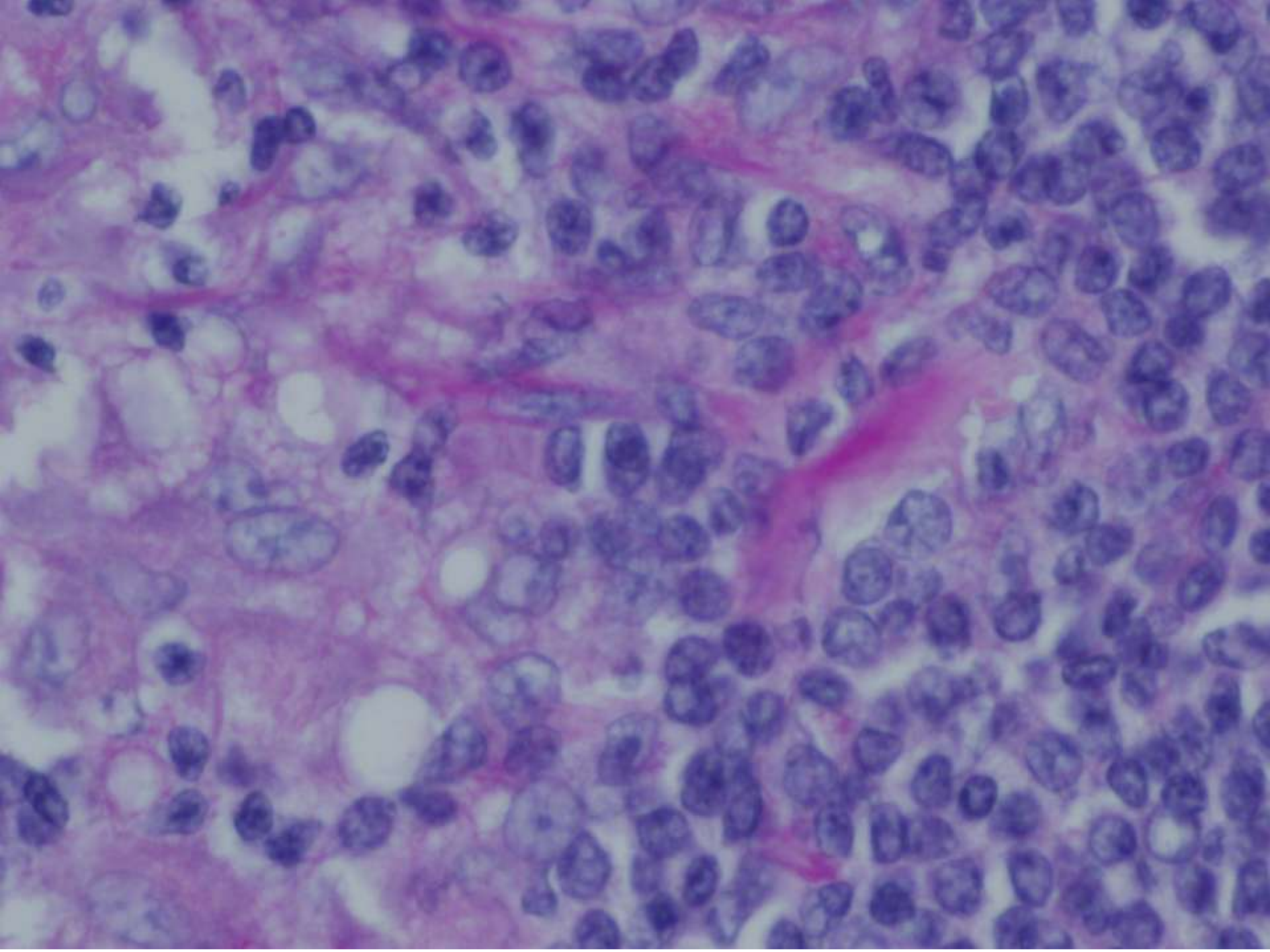
LINFOADENITIS GRANULOMATOSA

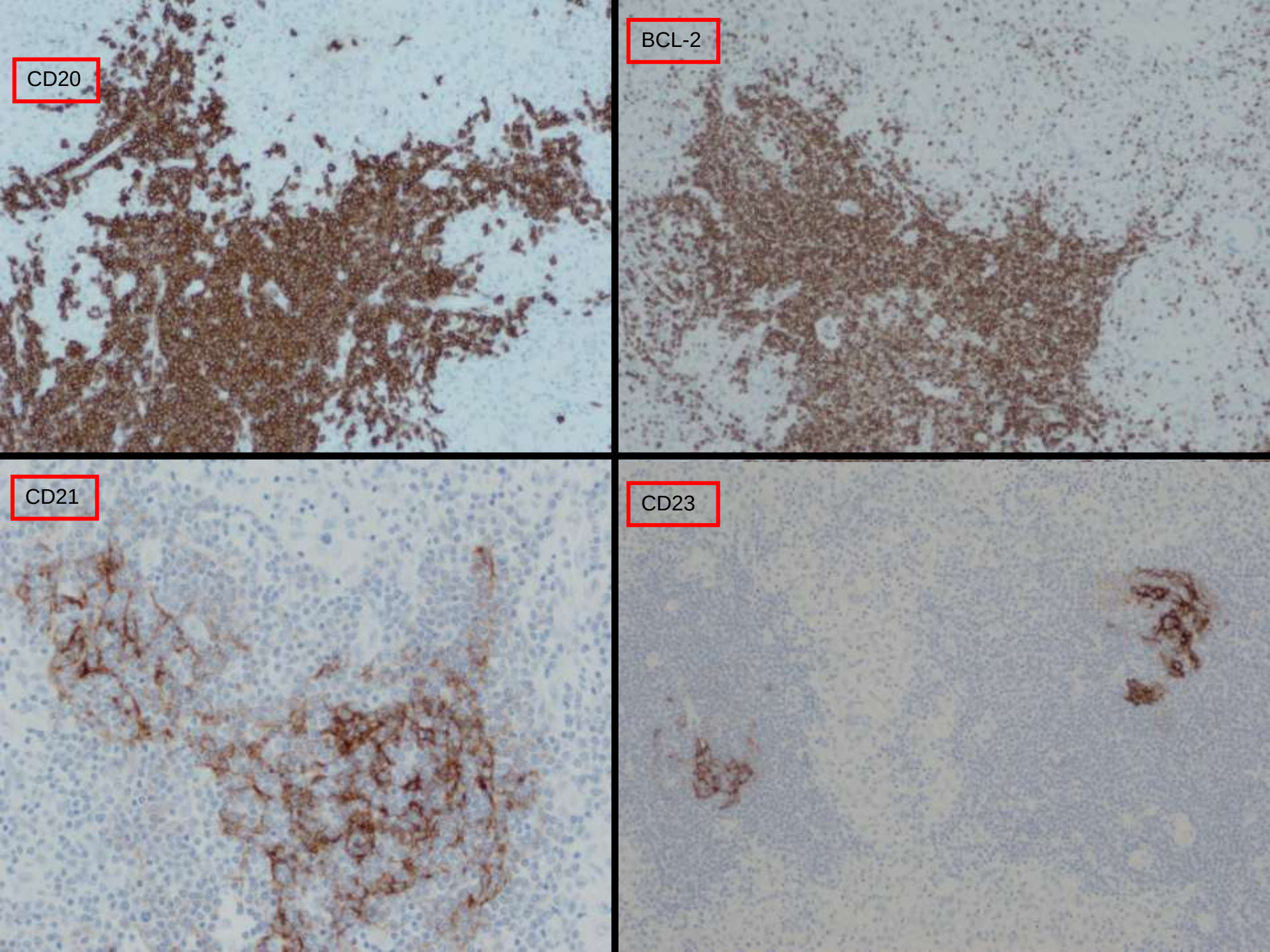


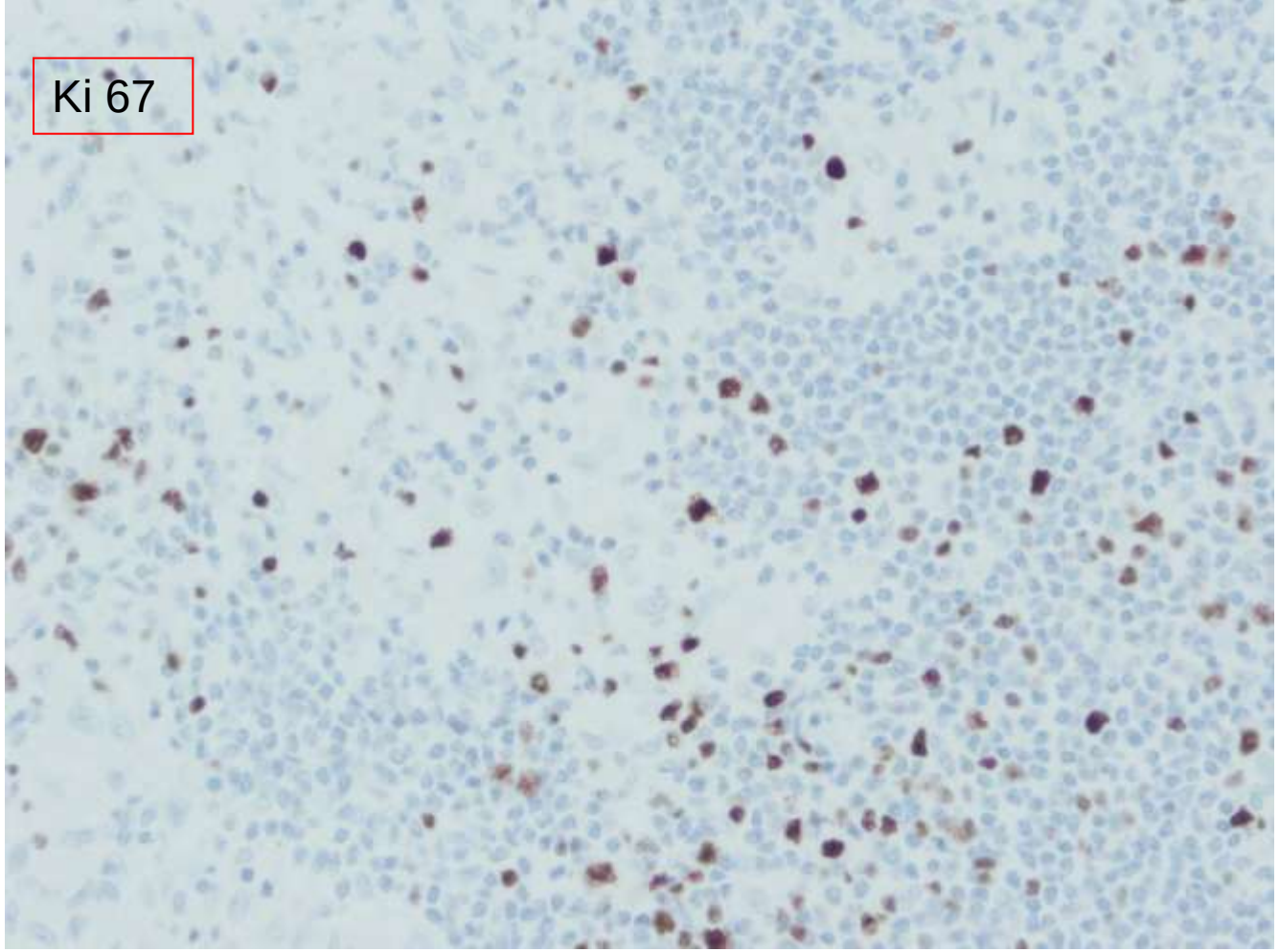









CD20
BCL-2
CD21
CD23




-

BCL-6

Ciclina-D1

MUM1

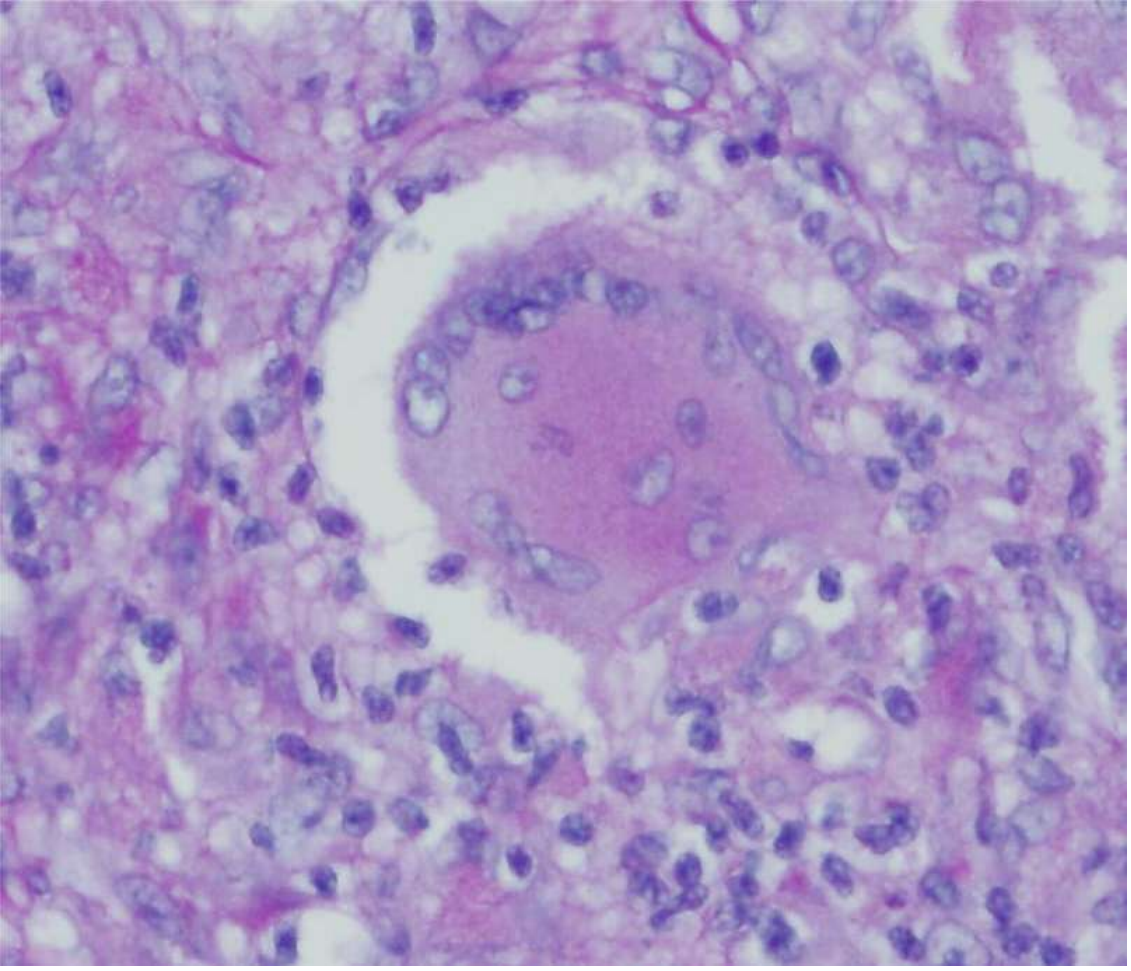
CD30

CD15

IgD

Reordenamento clonal del gen IgH

PCR



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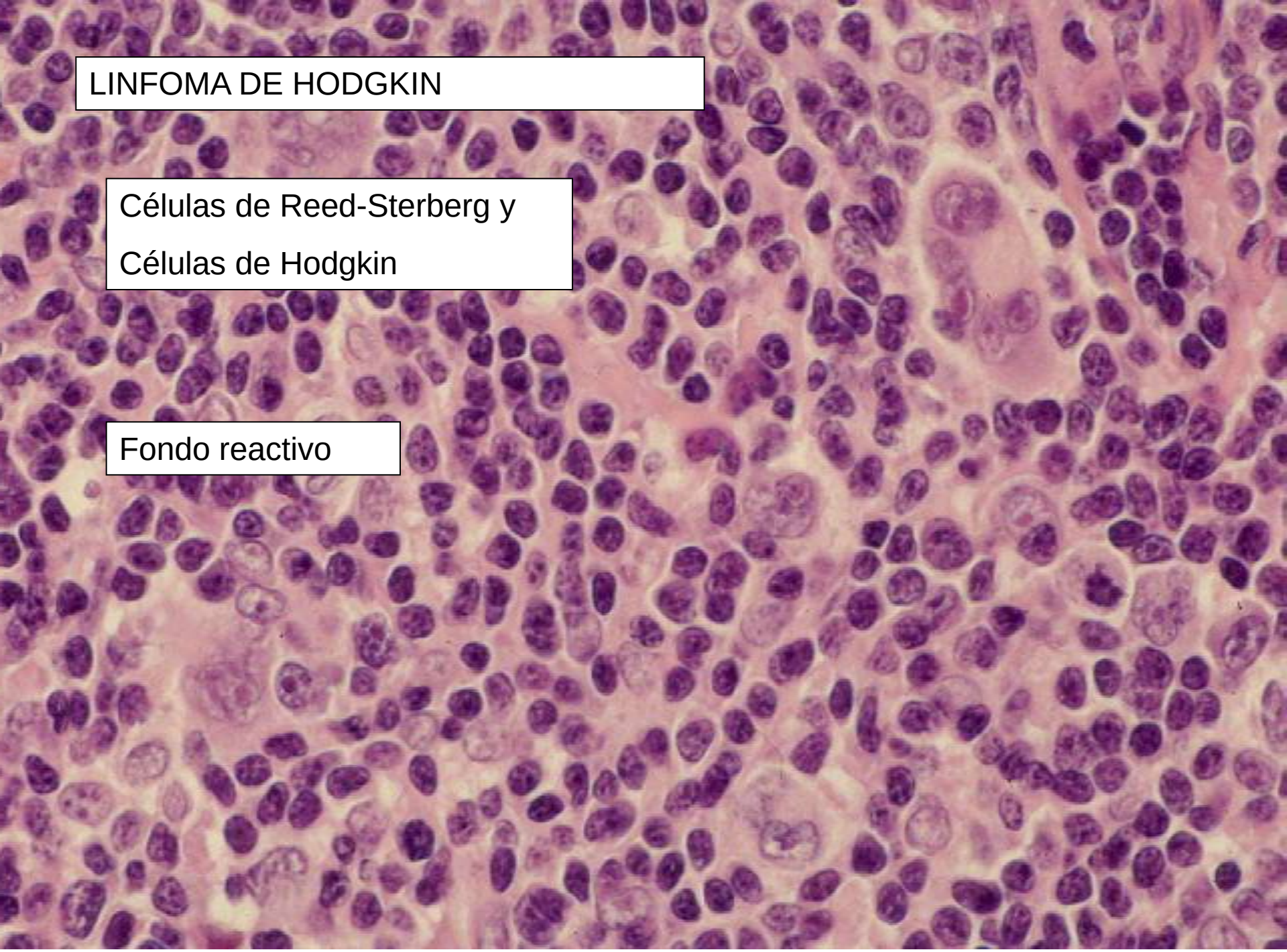
Ziehl-Nieelsen

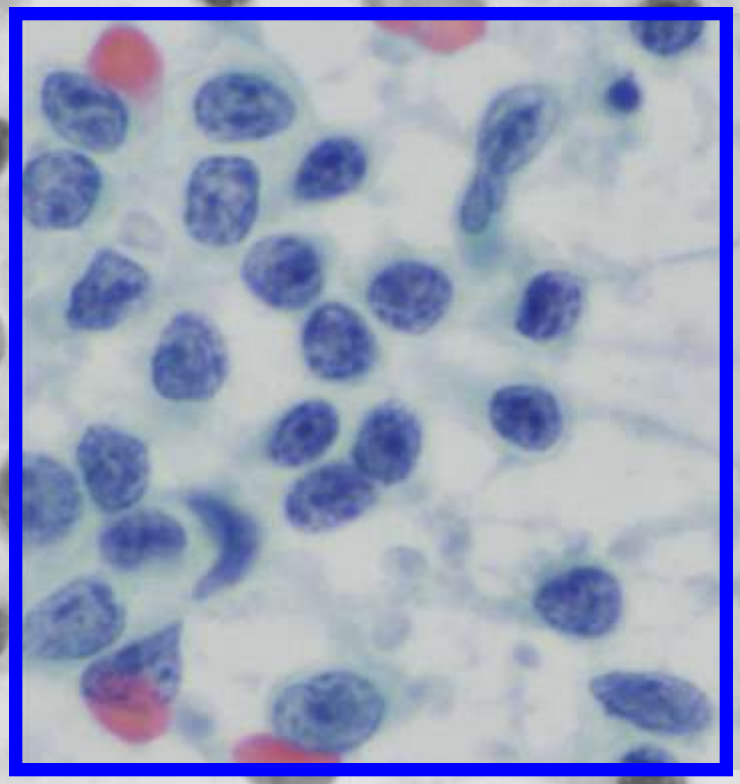
Bartonella henselae

Granada

# LINFOMA B DEL AREA MARGINAL ASOCIADO A INTENSA REACCIÓN GRANULOMATOSA CONCOMITANTE

1. Linfoma de Hodgkin
2. Linfadenitis granulomatosa
3. Timoma ectópico
4. Linfoma no Hodgkin


LINFOMA DE HODGKIN
Células de Reed-Sterberg y
Células de Hodgkin
Fondo reactivo



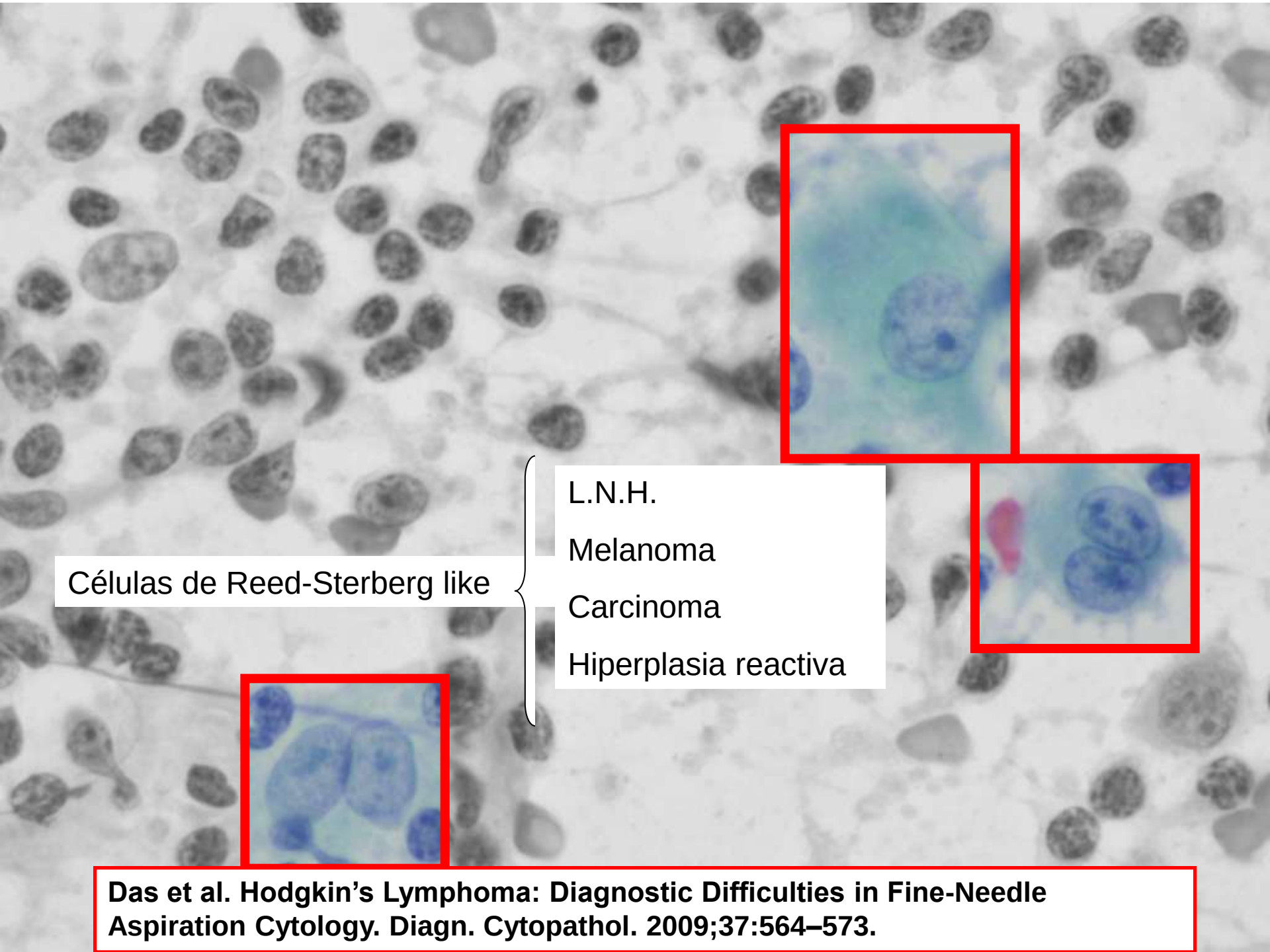
Linfoma de Hodgkin: clasificación de la OMS

- Clásico (~95%):

-Esclerosis nodular
-Celularidad mixta
-Depleción linfocitaria
-Rico en linfocitos (nodular)

- Predominio linfocitico nodular (~5%)

**Das et al. Hodgkin's Lymphoma: Diagnostic Difficulties in Fine-Needle Aspiration Cytology. Diagn. Cytopathol. 2009;37:564–573.**




**Das et al. Hodgkin's Lymphoma: Diagnostic Difficulties in Fine-Needle Aspiration Cytology. Diagn. Cytopathol. 2009;37:564–573.**

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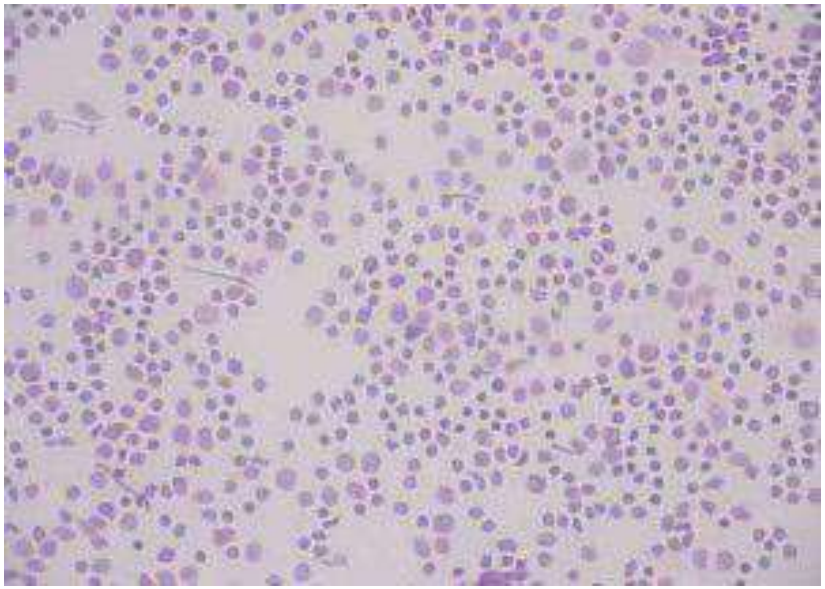
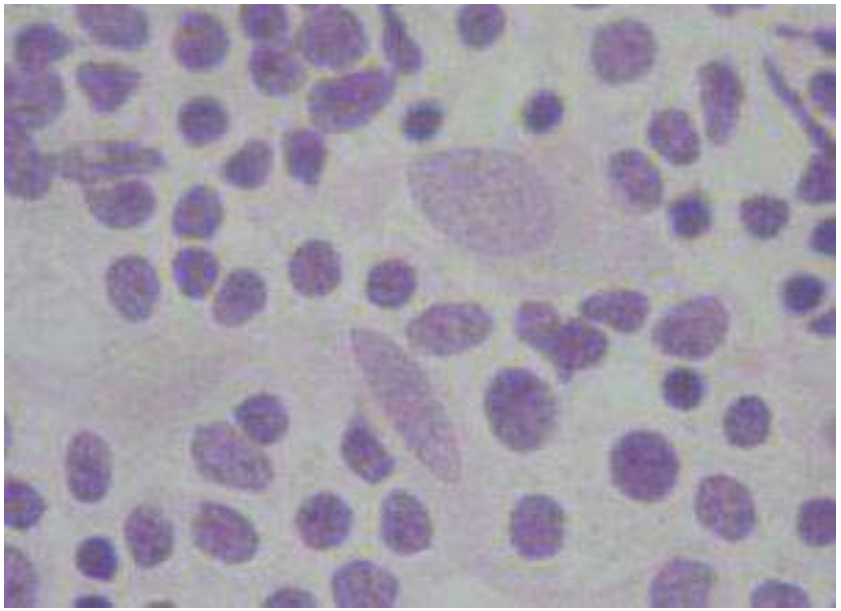
Los timomas pueden tener localización ectópica, lo que se explica por una anomalía del descenso, durante su vida embrionaria. Así, pueden ser vistos en: el cuello, tiroides, el pulmón y la pleura. Los timomas ectópicos son propensos a ser confundidos con otros tumores tales como carcinomas o linfomas, es probable que no se piense en ellos.





**Chan, J.K. ; Rosai, J. : Tumors of the Neck showing thymic or related branchial pouch differentiation: A unifying concept. Hum. Pathol. 22:349-367. 1991**

**TIMOMA CERVICAL (ECTÓPICO), RICO EN LINFOCITOS. INMUNOHISTOQUÍMICA Y MICROSCOPIA DE ALTA RESOLUCIÓN.*Góngora Jara, Hugo; Diconca, Jorge; Hliba, Ernesto; Ortiz, Susana.*** IV-CVHAP 2001

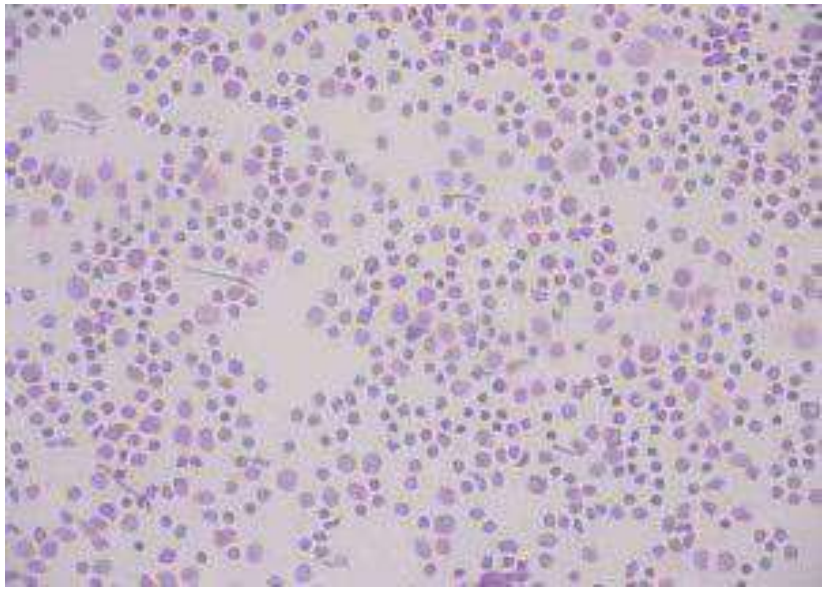
## timoma

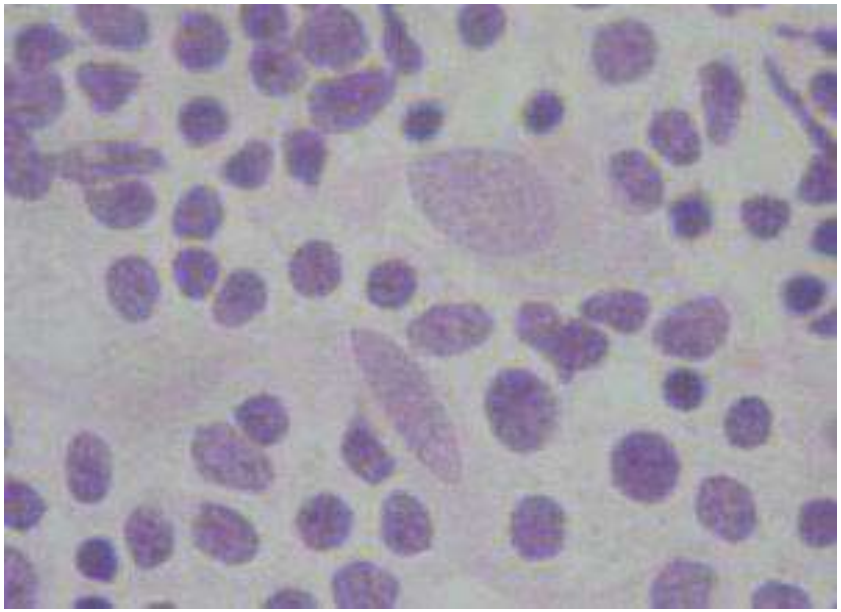
Población mixta:

Linfoide madura y epitelial

Componente epitelial:

Núcleo anodino y escaso citoplasma mal definido, cuboideo o fusiforme, parecido a los histiocitos, que suelen aparecer en grupos por lo que suelen confundirse con granulomas epitelioides





Rodriguez Costa J, De Agustín D..Punción Aspiración con –aguja Fina de órganos superficiales y profundos.Ed. Diaz de Santos. 1997. Madrid

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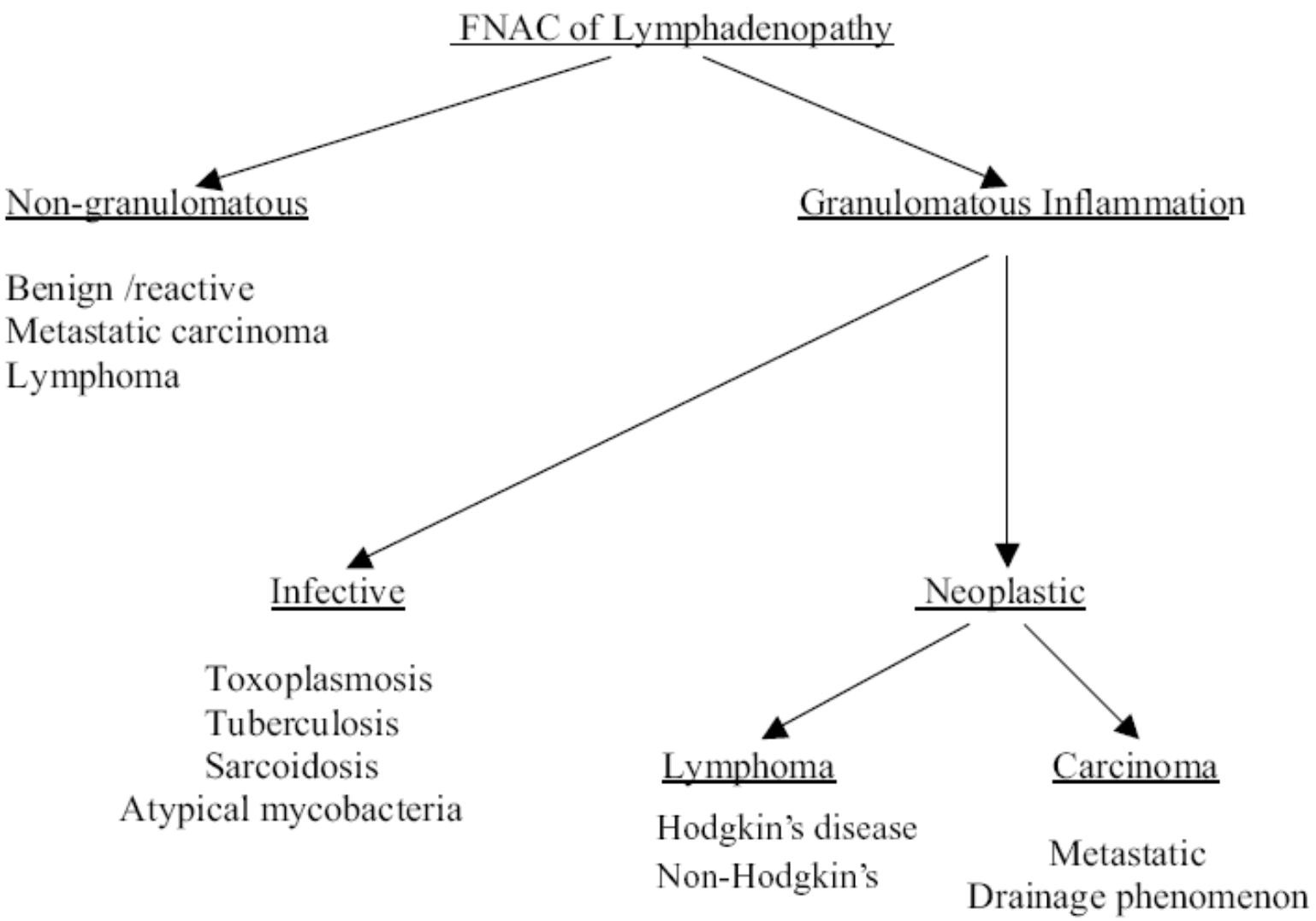
ALGORITHM

*Aetiologies of lymphadenopathy*




**V Koo, TF Lioe, RAJ Spence.Fine needle aspiration cytology (FNAC) in the diagnosis of granulomatous lymphadenitis. *Ulster Med J* 2006; 75 (1) *59-64***

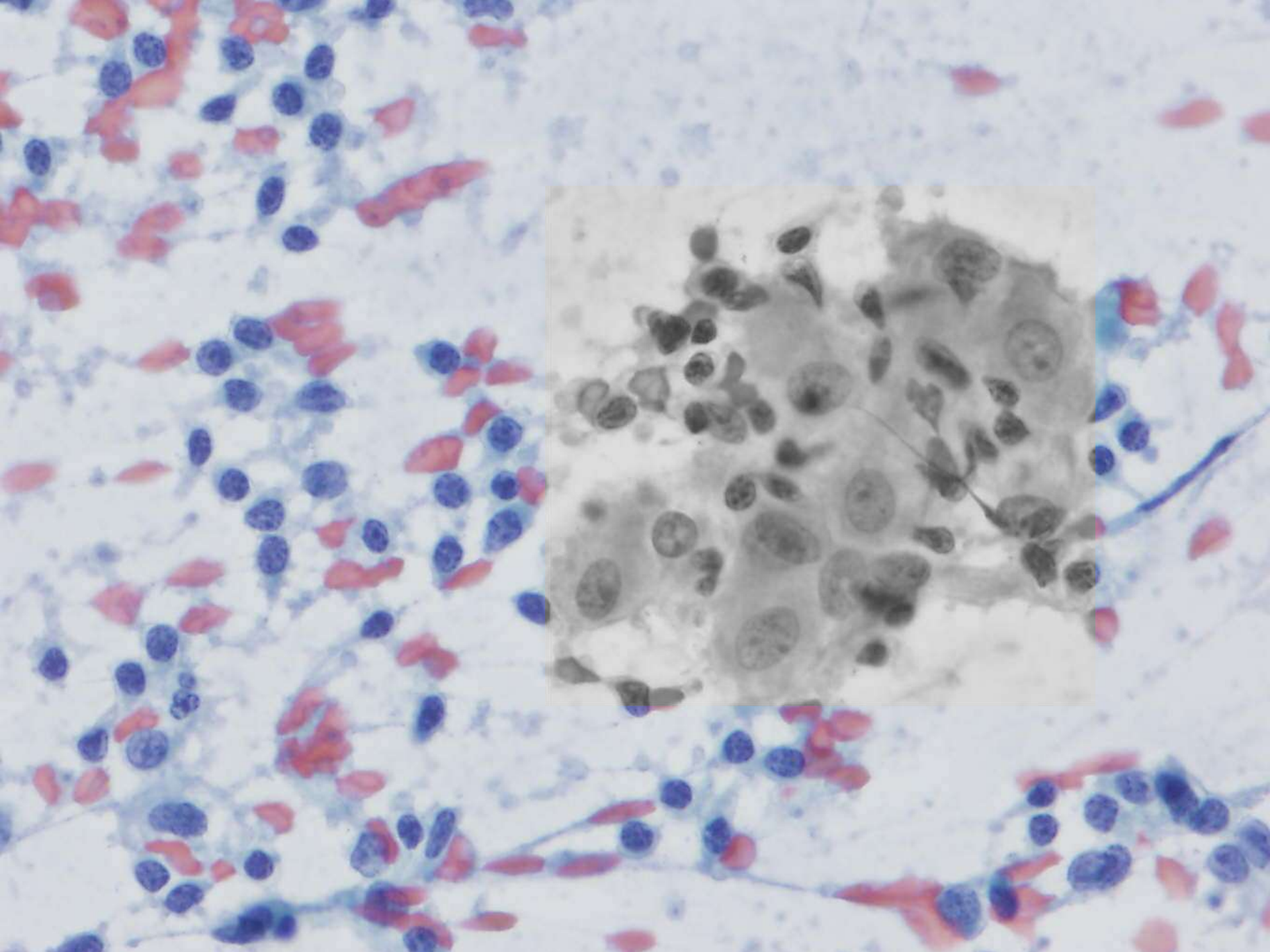
**Vaíllo A. et al.Marginal zone B-cell lymphoma of the parotid gland associated with epithelioid granulomas. Report of a case with fine needle aspiration. Acta Cytol. 2004 May-Jun;48(3):420-4.**

**Laforga J. et al. Splenic marginal B-cell lymphoma with epithelioid granulomas. Report of a case with cytologic and immunohistochemical study. Cancer Therapy Vol 7, 21-26, 2009**

GRANULOMAS

2-7% L.N.H.

2-29% L.H.



EFICIENCIA

CITOMETRÍA DE FLUJO > CITOLOGÍA CONVENCIONAL

PROCESO REACTIVO

LNH-B

LNH-T

CITOMETRÍA DE FLUJO < CITOLOGÍA CONVENCIONAL

LH VS PR

**Barrena S., Almeida J.,1 García-Macias MC.Flow cytometry immunophenotyping of fine-needle aspiration specimens: utility in the diagnosis and classification of non-Hodgkin lymphomas. Histopathology 2011:1365-2559.**

El uso combinado de CF + Citología convencional debería ser obligado para el screening diagnóstico de PAAF, ya que la información de ambas es complementaria y no redundante.

**Barrena S., Almeida J.,1 García-Macias MC.Flow cytometry immunophenotyping of fine-needle aspiration specimens: utility in the diagnosis and classification of non-Hodgkin lymphomas. Histopathology 2011:1365-2559.**

**Ensani F. et al. Fine-needle aspiration cytology and flow cytometric immunophenotyping in diagnosis and classification of non-Hodgkin lymphoma in comparison to histopathology. Diagn. Cytopathol. 2010**

**Paro MM.Flow cytometry immunophenotyping (FCI) of fine needle aspirates (FNAs) of lymph nodes. Coll Antropol. 2010 Jun;34(2):359-65**

| | URV/GDR | Ptas. | **TOTAL ptas.** |
|---|---|---|---|
| CMF (a) | 30 | 450 | **13.500** |
| PAAF superficial (b) | 8 | 1.319 | **10.552** |
| Estudio histológico del ganglio por patólogo ( c) | 13 | 1.319 | **17.147** |
| IHQ/ICQ (d) | 5 | 1.319 | **6.595** |
| Toma de biopsia por cirujano de lesión superficial (e) | 0,0962 | 424.444 | **40.831** |

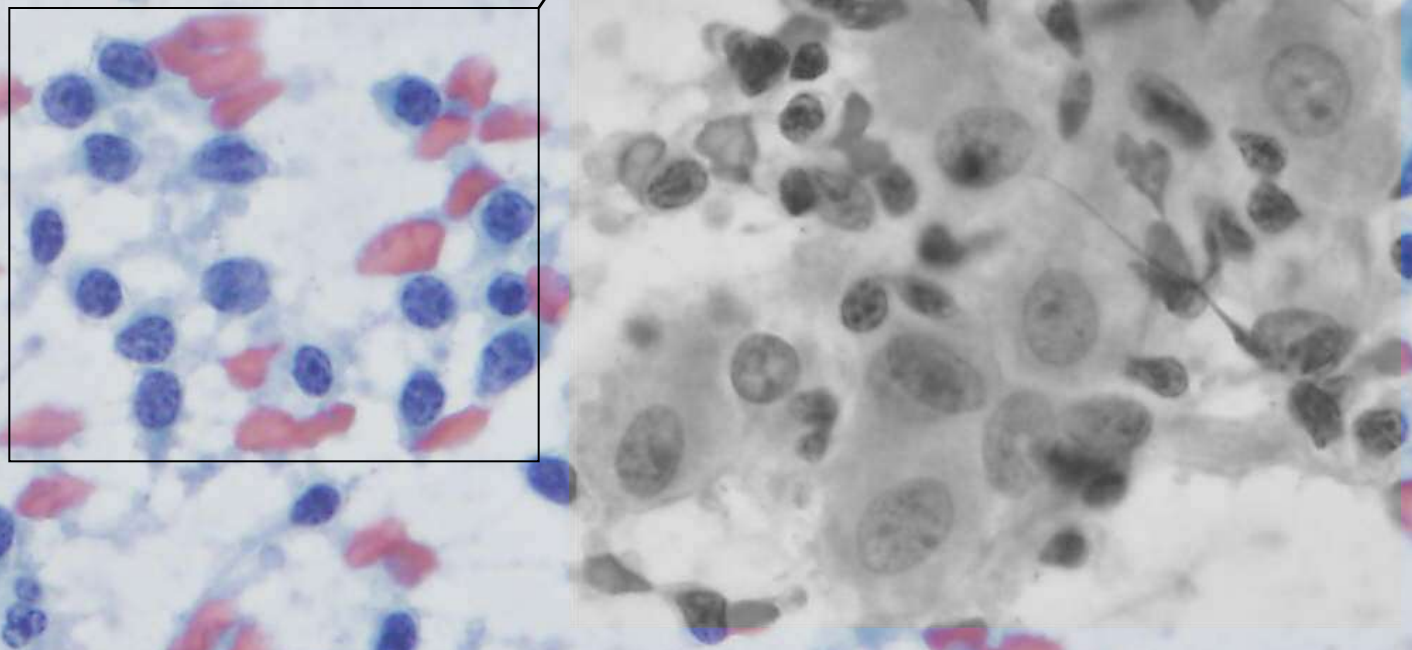
COSTE DE PAAF + CMF = a + b = 24.052 ptas.
COSTE DE BIOPSIA = e + (6*d) + c = 97.548 ptas

**Esquivias J, Moreno M.I.; Villar E.; Marcos C.; Ruiz F .Utilización de la citomorfología junto con la citometría de flujo en material obtenido por PAAF en lesiones linfoproliferativas. Comparación de coste frente a la biopsia. Rev.Esp.Patol. 2001;34(3):225-232**

I.C.Q.

CITOMETRÍA DE FLUJO

BIOLOGÍA MOLECULAR



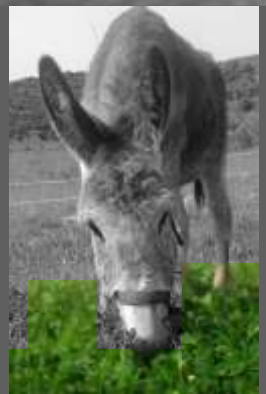
CTL GÍA

H.C.S. Cecilio

Granada



# Gracias



**ZARAGOZA**

**18 de mayo de 2011**