Vellosidades coriales “raras”

Enfermedad trofoblástica, displasia mesenquimal y tumores
Curso corto sobre patología placentaria

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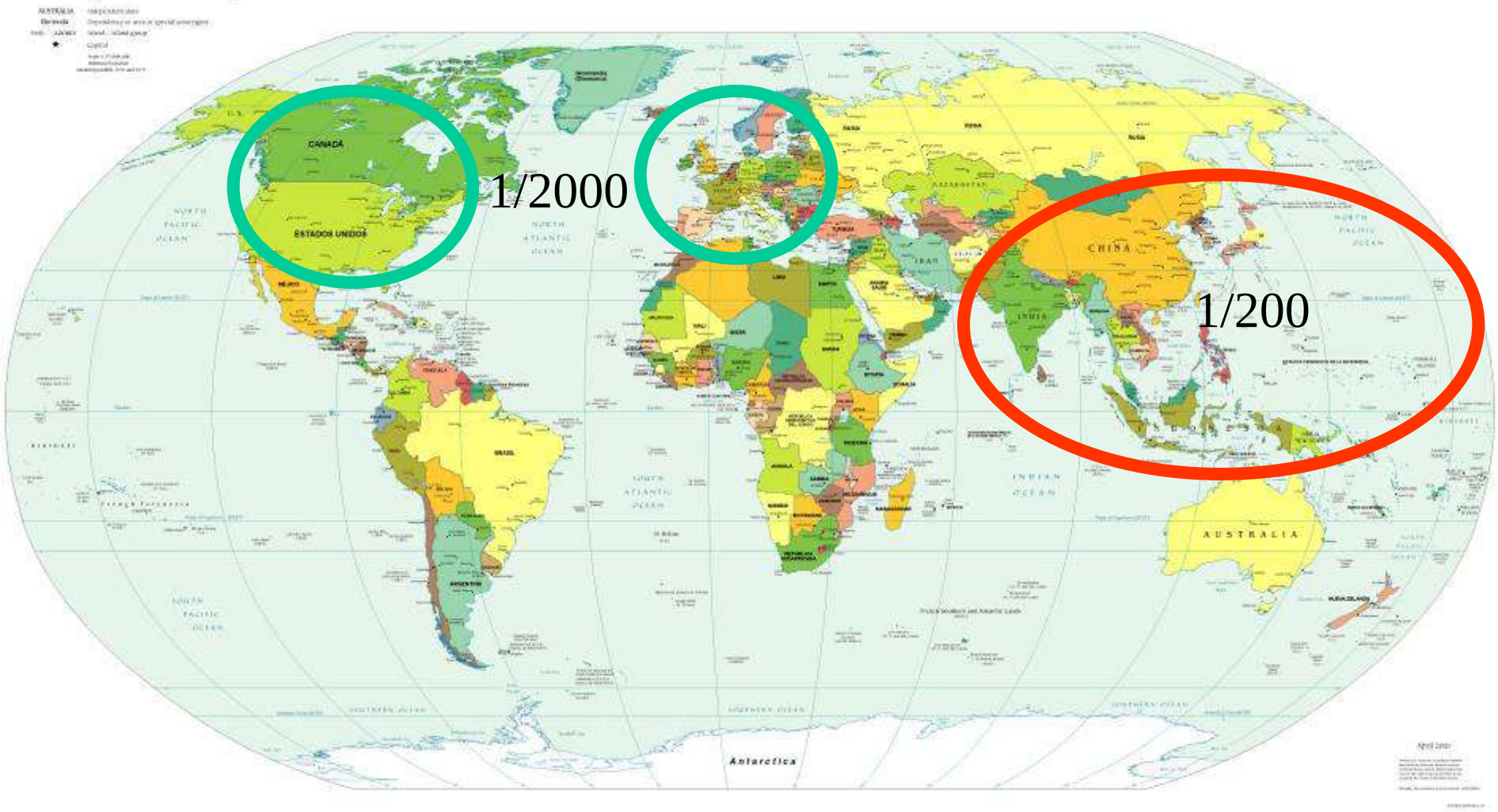
- Mola hidatidiforme completa
- Mola hidatidiforme parcial
- Displasia mesenquimática
- Vellosidades dismórficas
- Tumores

¿Mola hidatiforme o mola hidatidiforme?

Hidatiforme = hidatidiforme

"Con forma de hidátide"

Political Map of the World, April 2001



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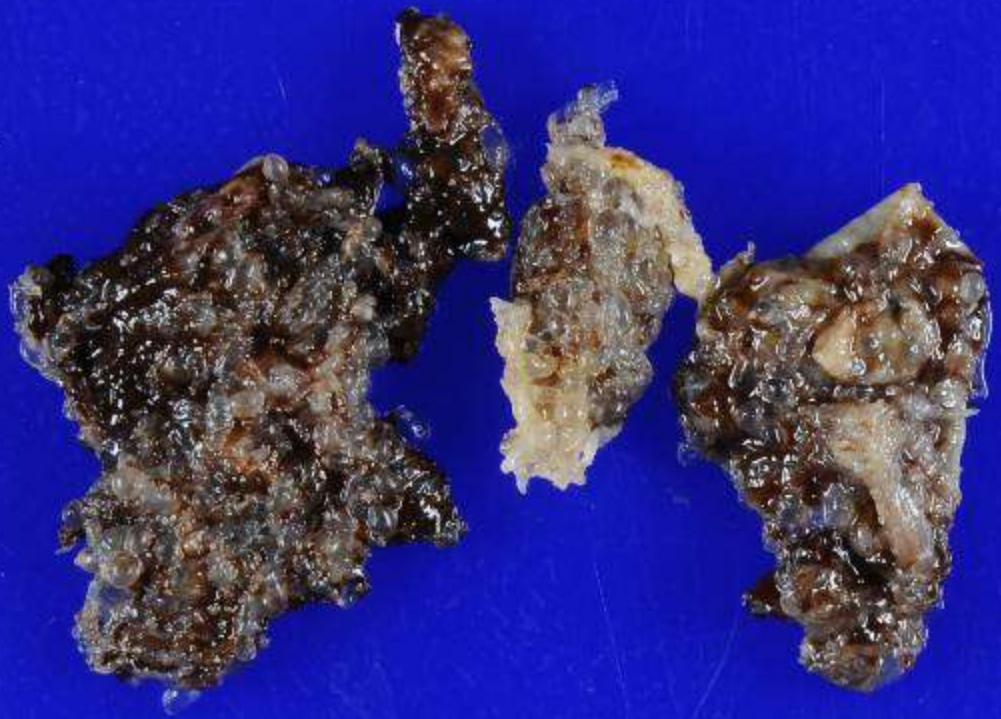
Mola completa

- Material abundante
- Vesículas visibles
- Vellosidades hidrópicas
- Cisternas
- Hiperplasia del trofoblasto
  - Circunferencial
  - Cito y sincitiotrofoblasto



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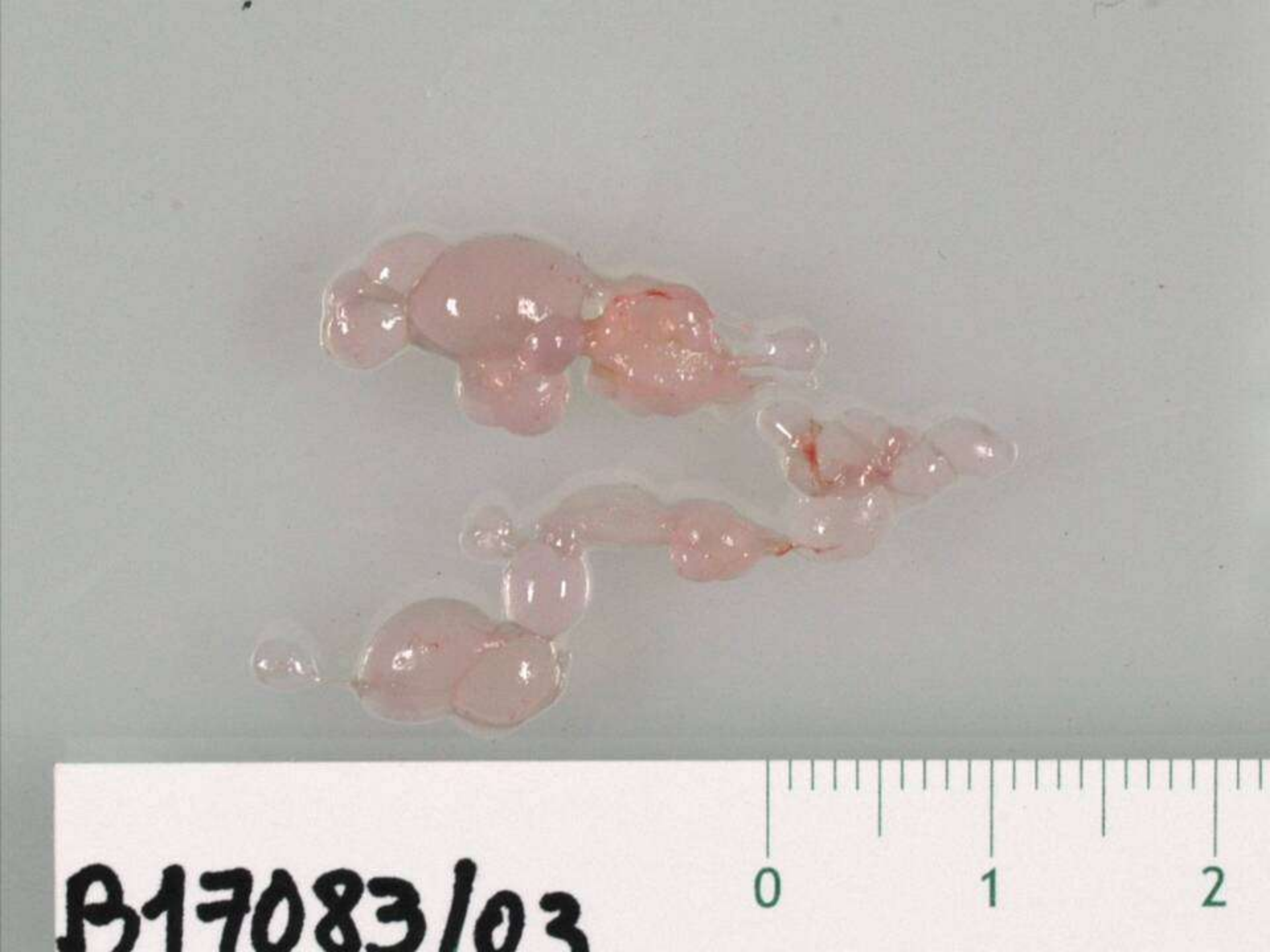
ANATOMIA PATOLÒGICA. HOSPITAL CLÍNIC. BARCELONA

Mola completa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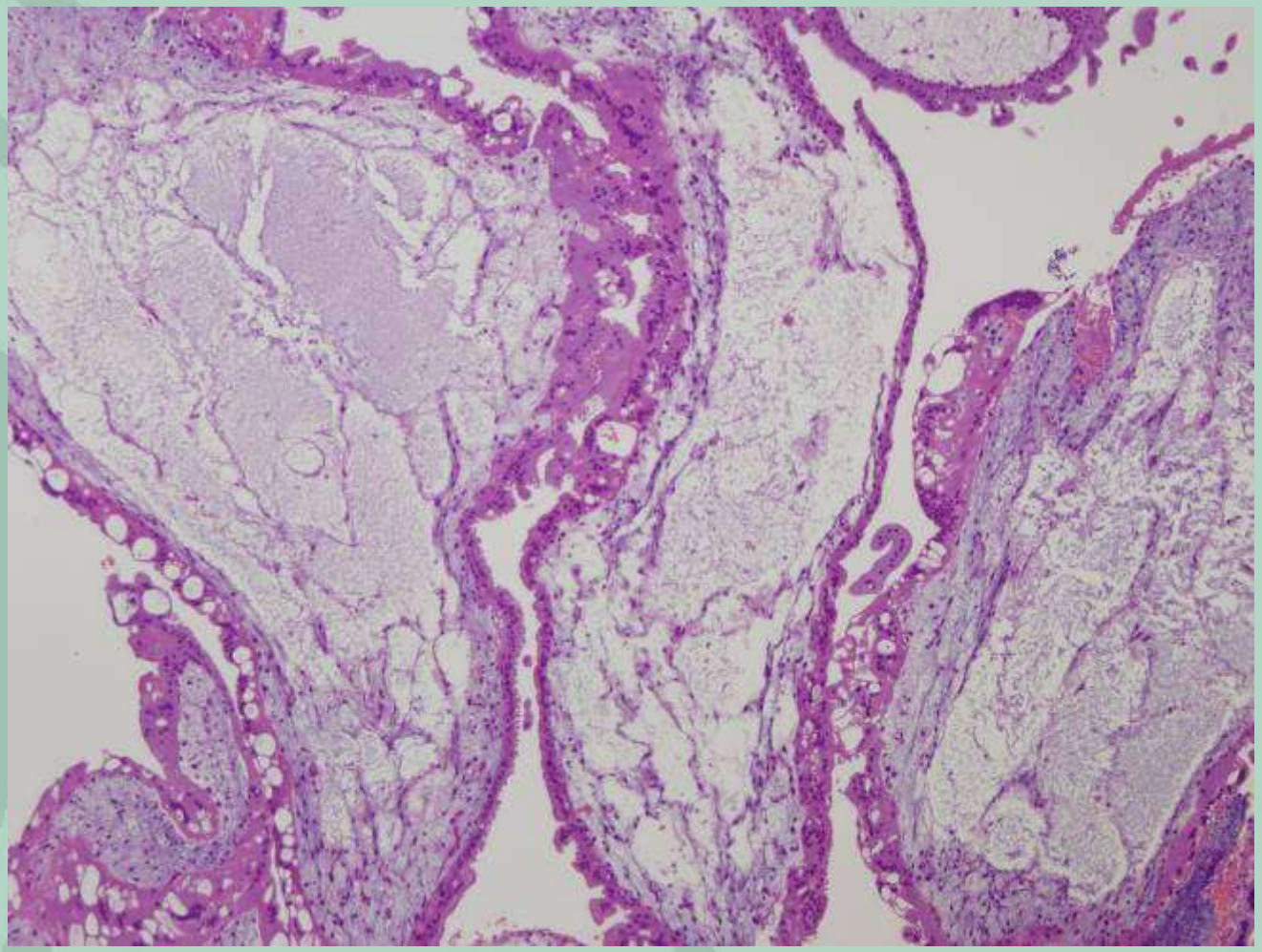

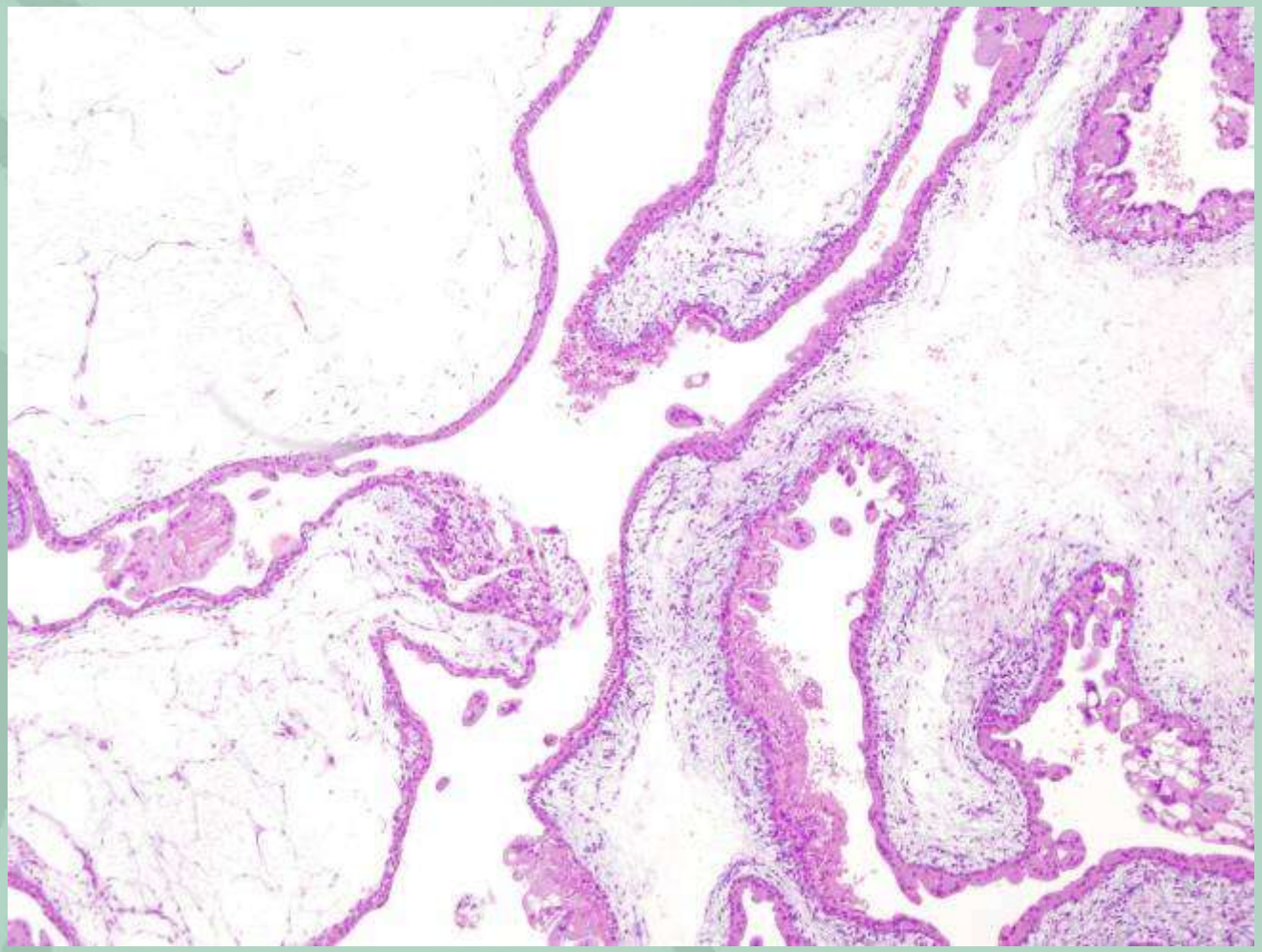

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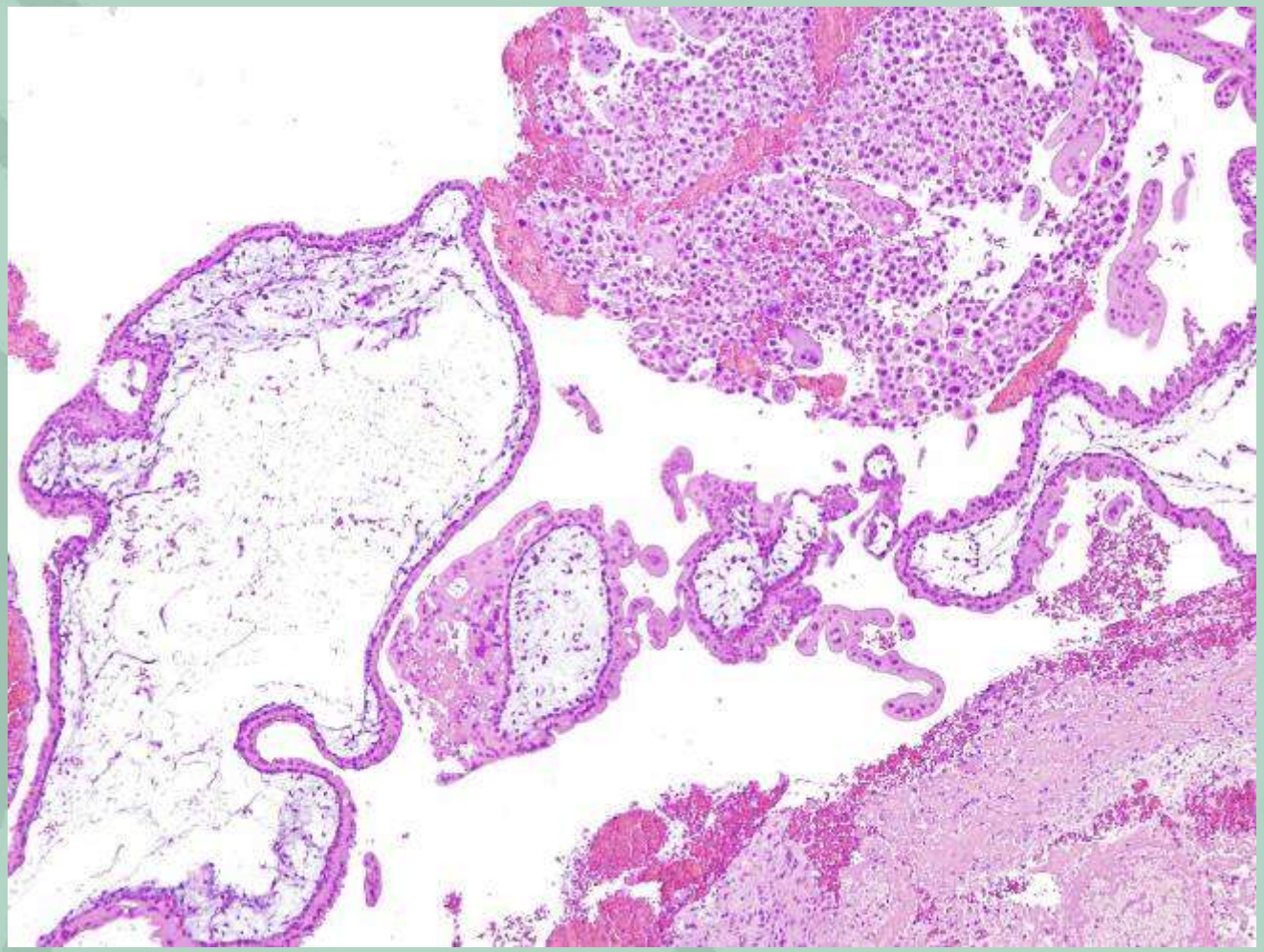

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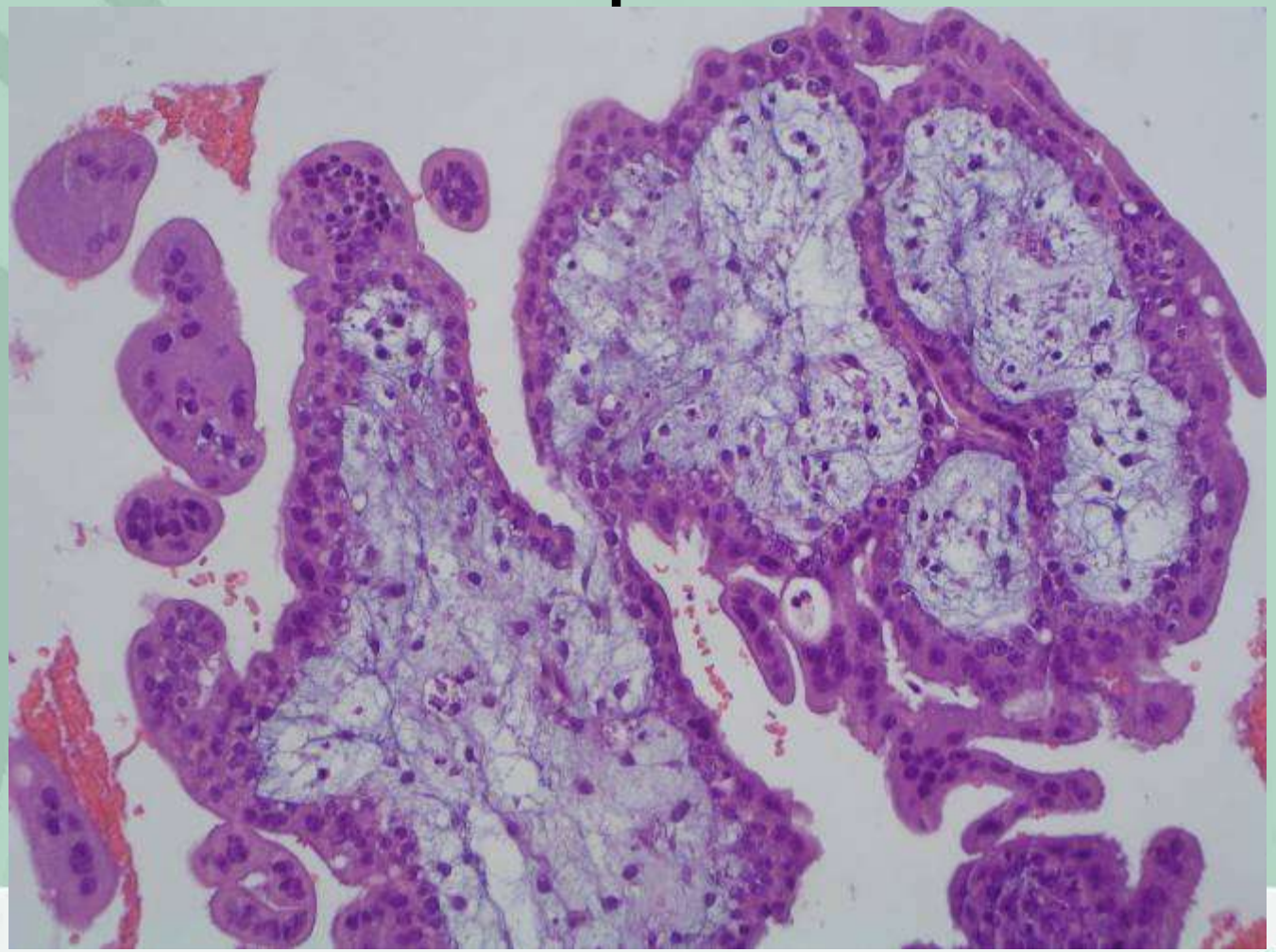
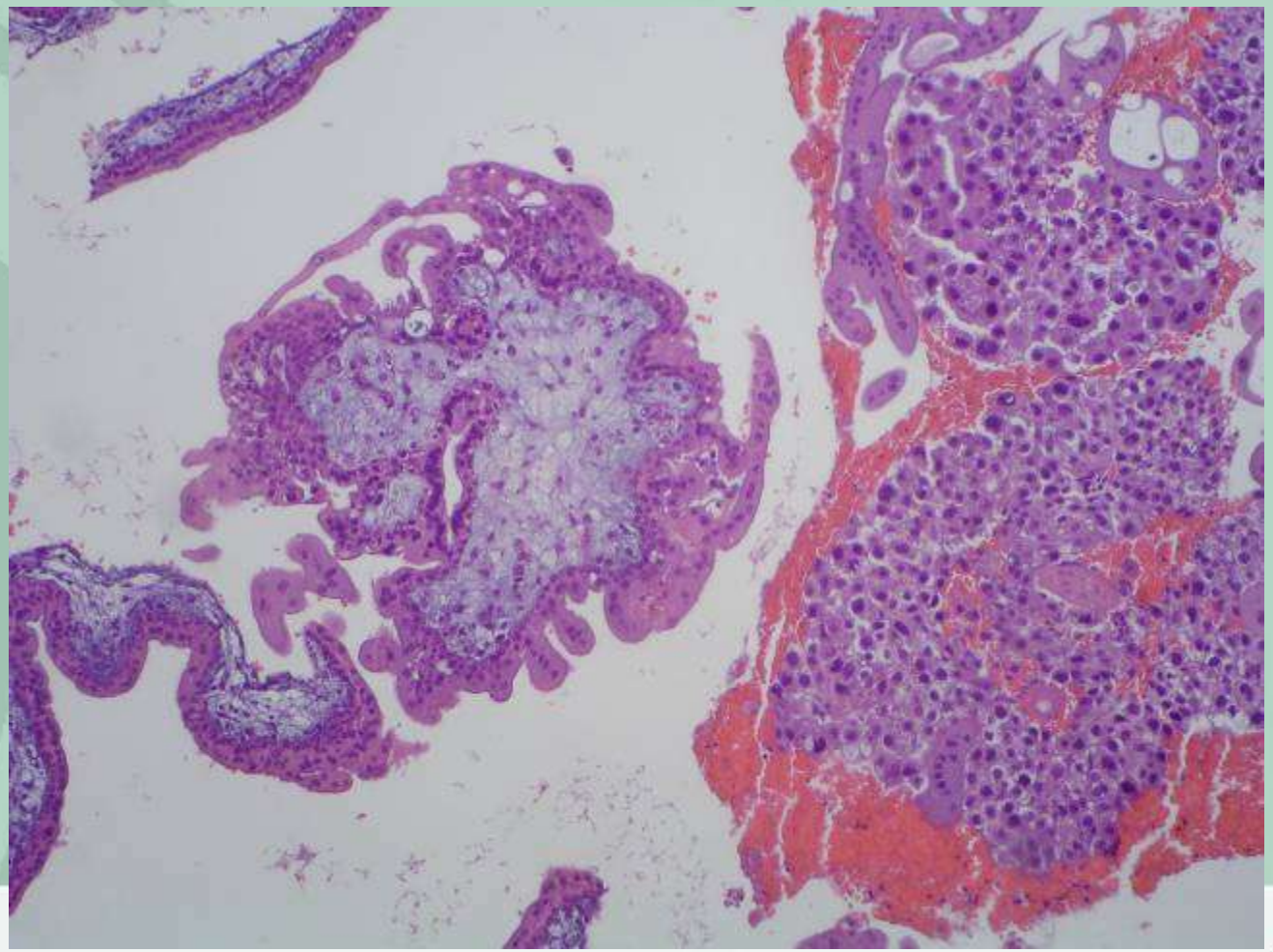
Mola completa inicial (*early mole*)

- Edema difuso
- Estroma vellositario azulado
- Hipercelularidad estromal con cariorexis
- Hiperplasia del trofoblasto
- Aspecto de maza

Mola completa inicial



Mola completa inicial



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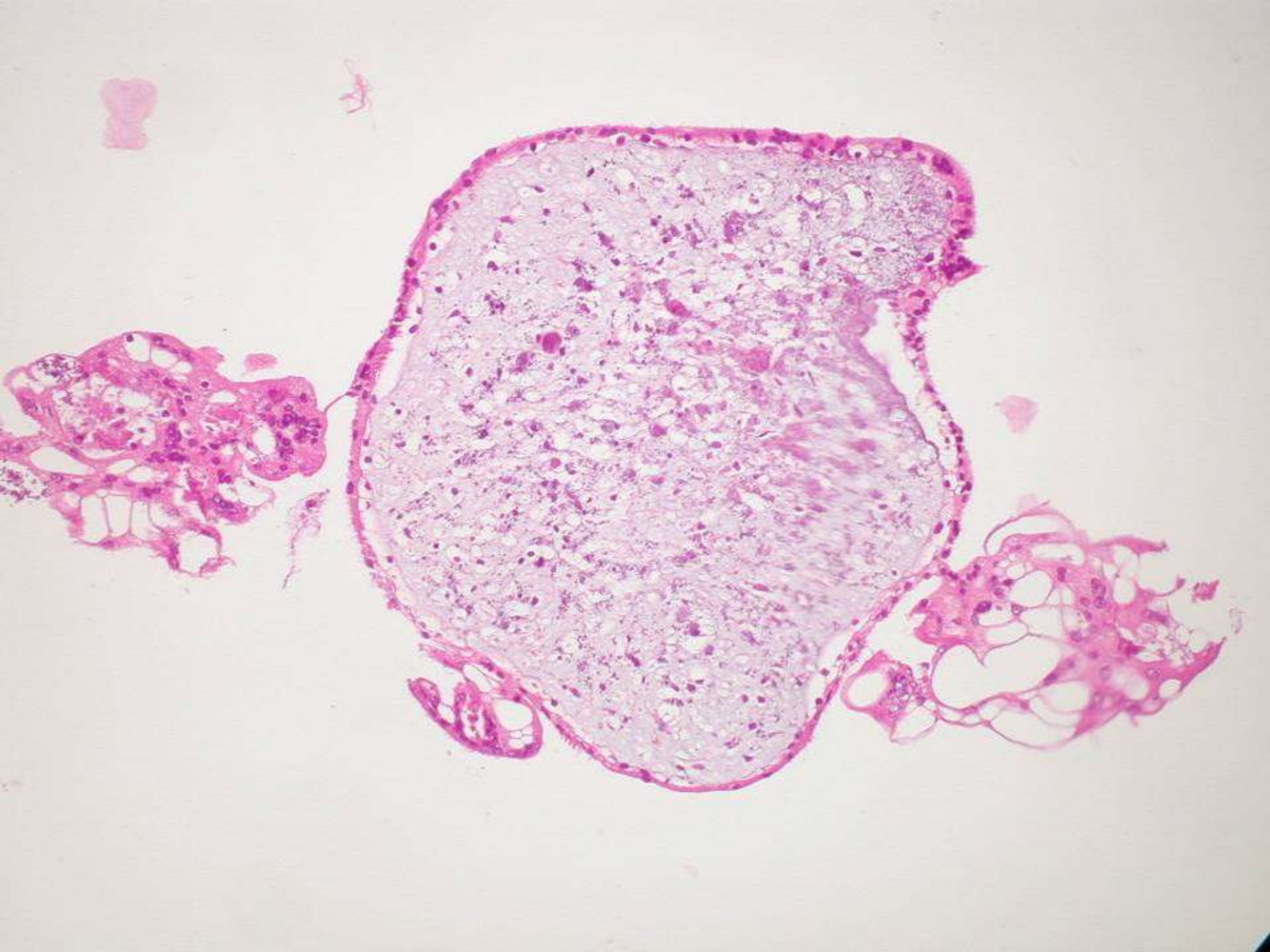
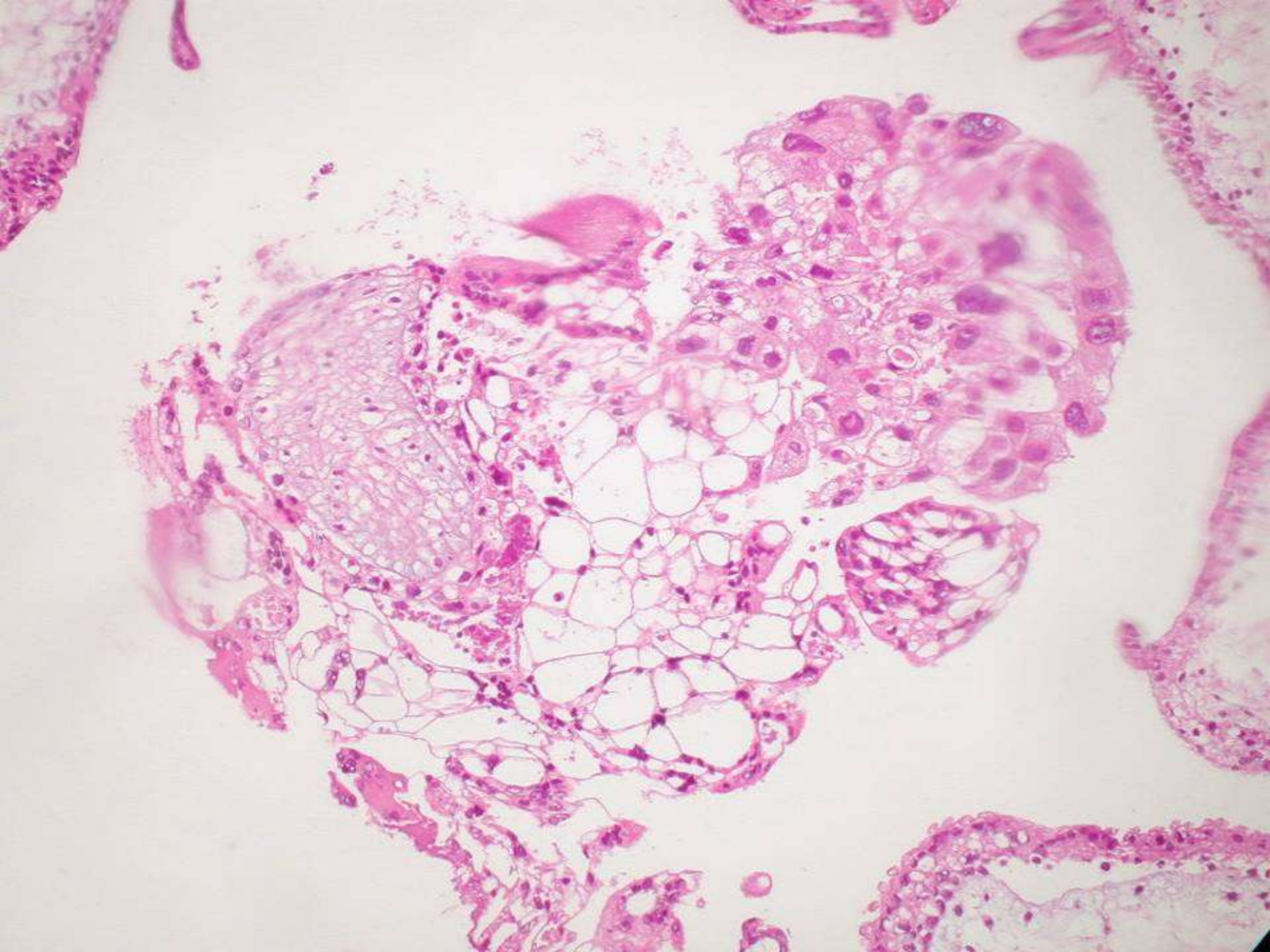
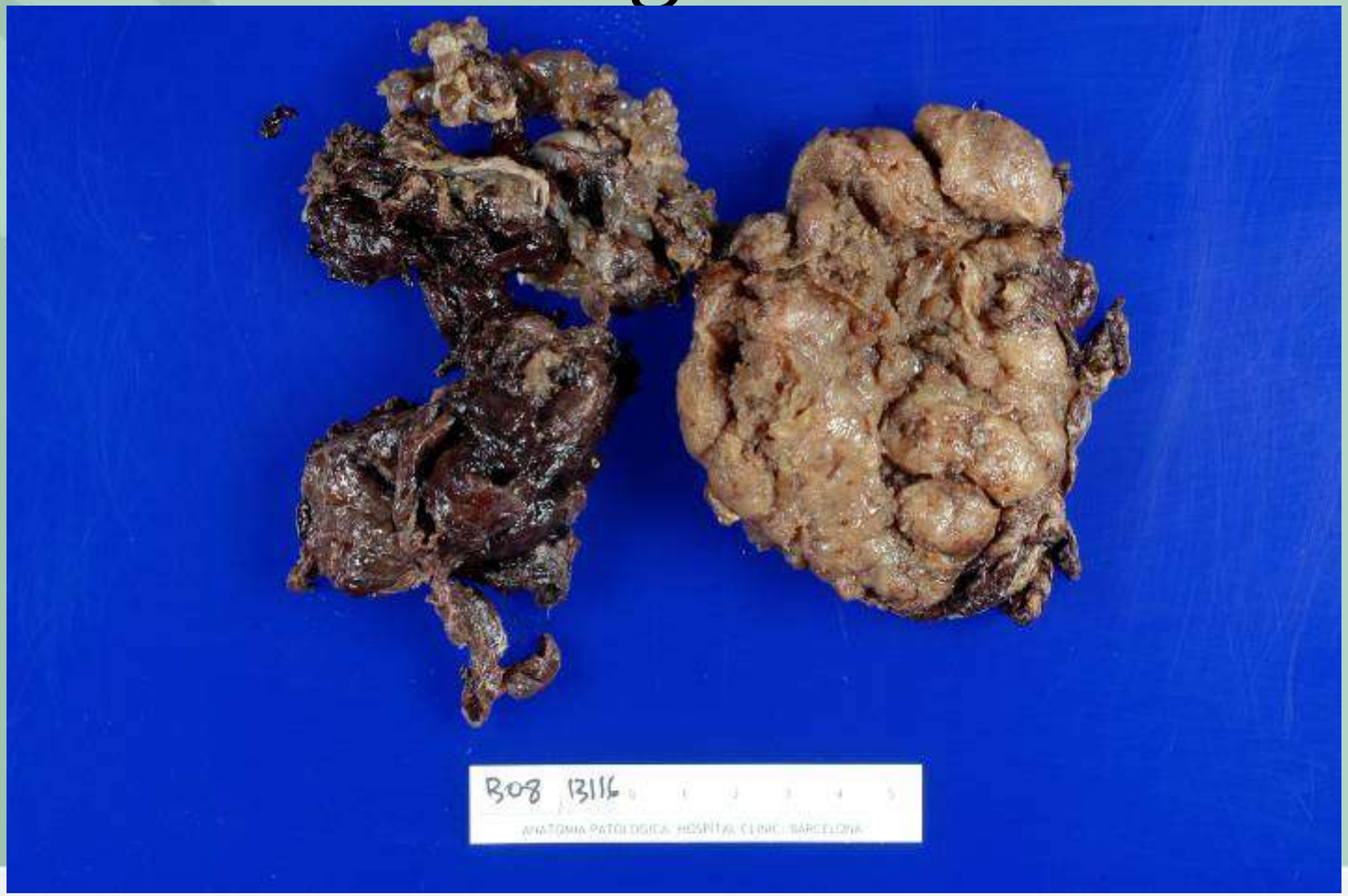




Mola gemelar



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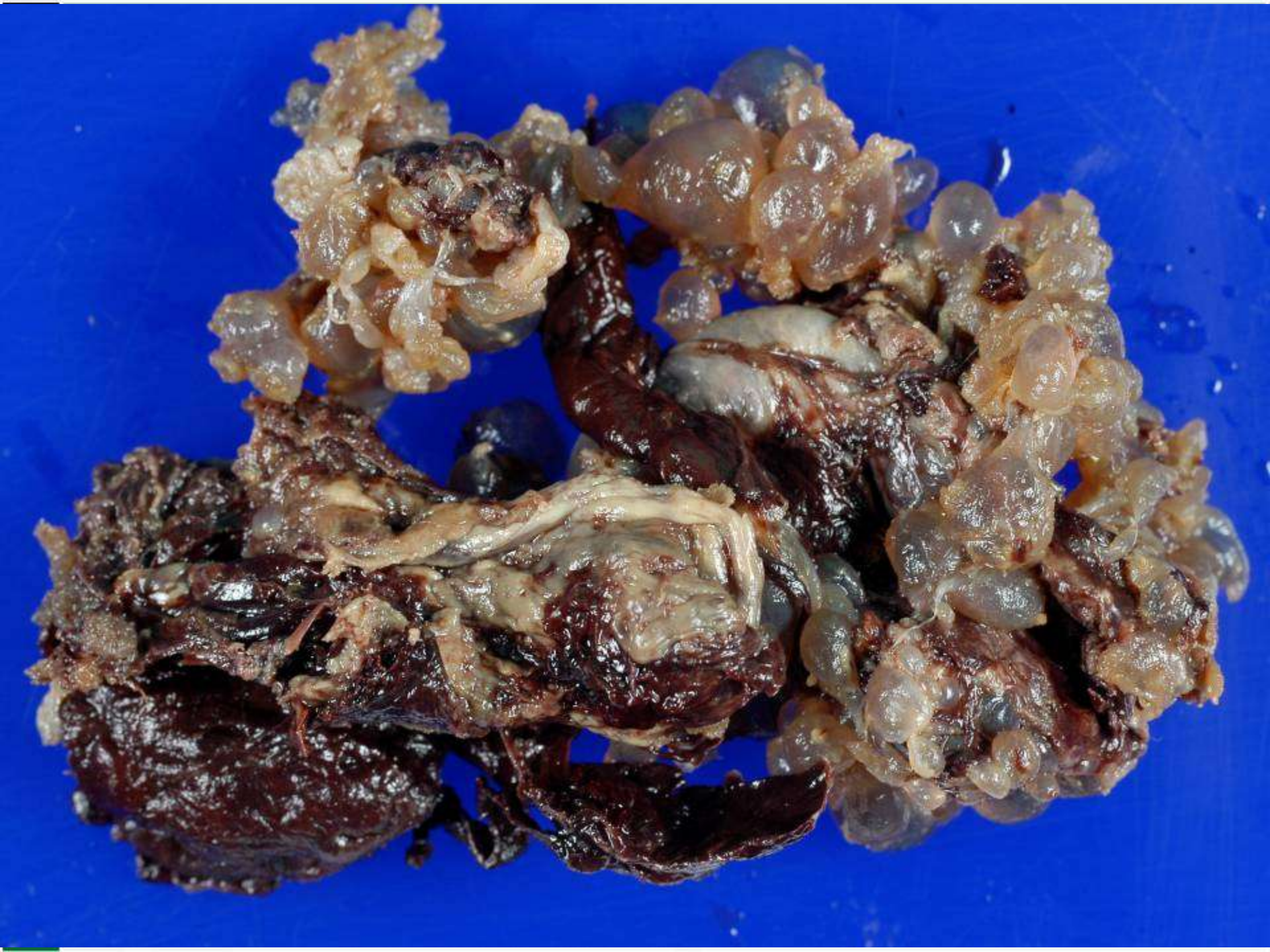
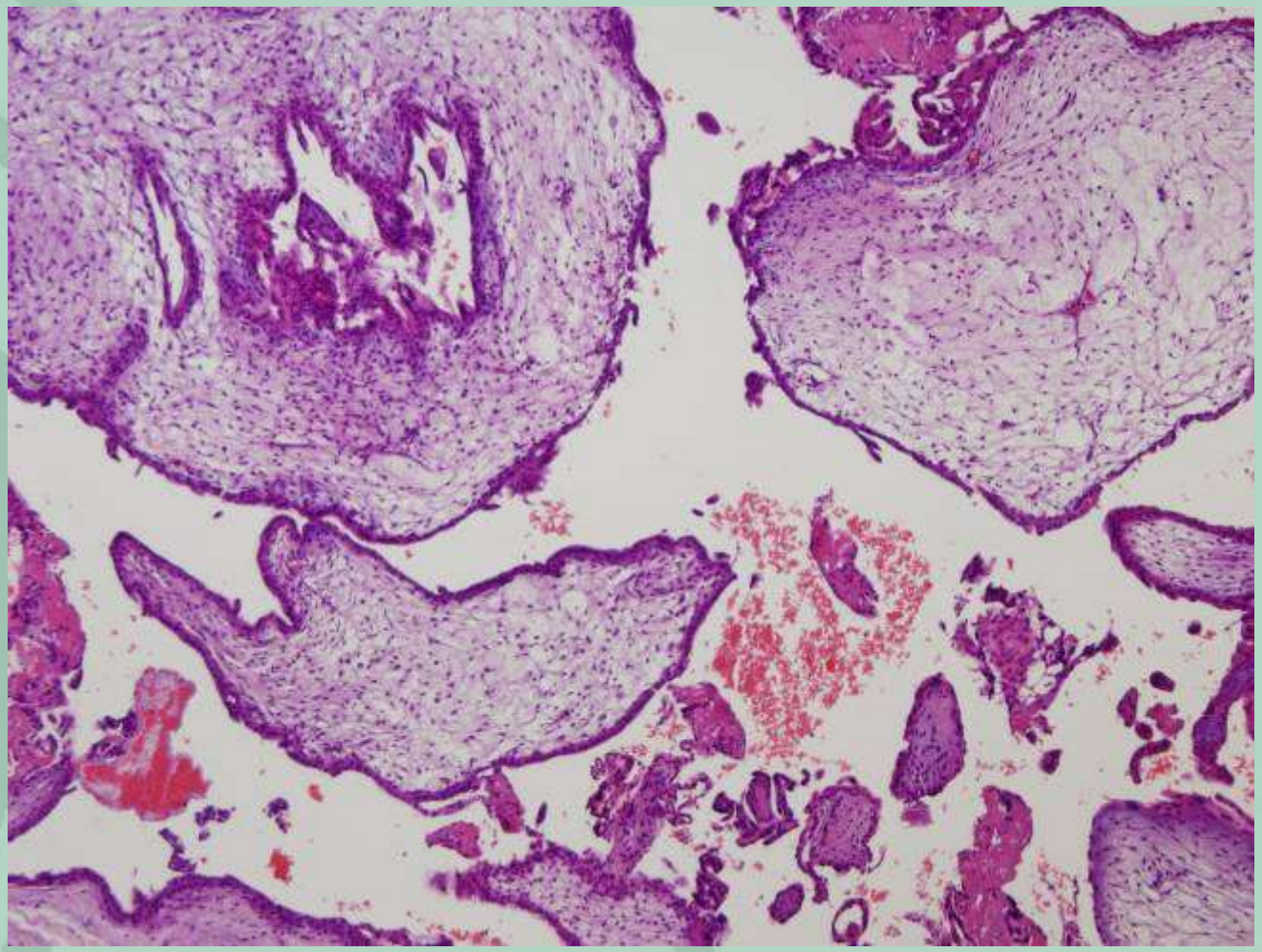


Mola parcial

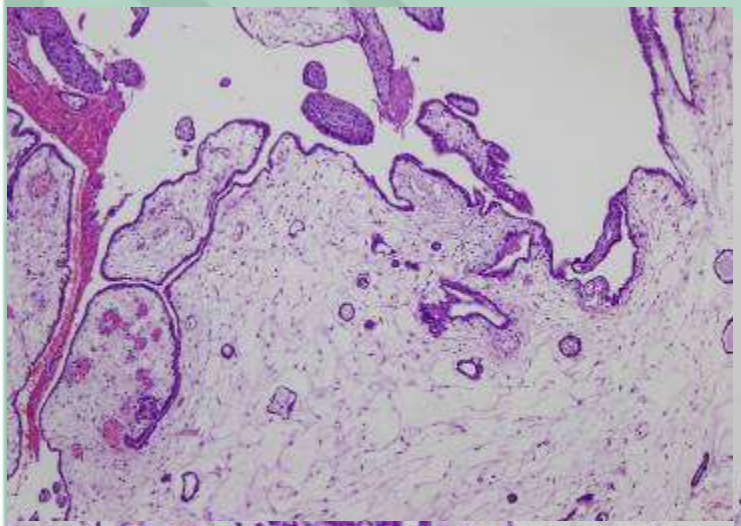
- Dos poblaciones de vellosidades diferentes
- Hiperplasia trofoblástica circunferencial
- Indentación del contorno de las vellosidades
- (Pseudo)Inclusiones trofoblásticas
- Cisternas

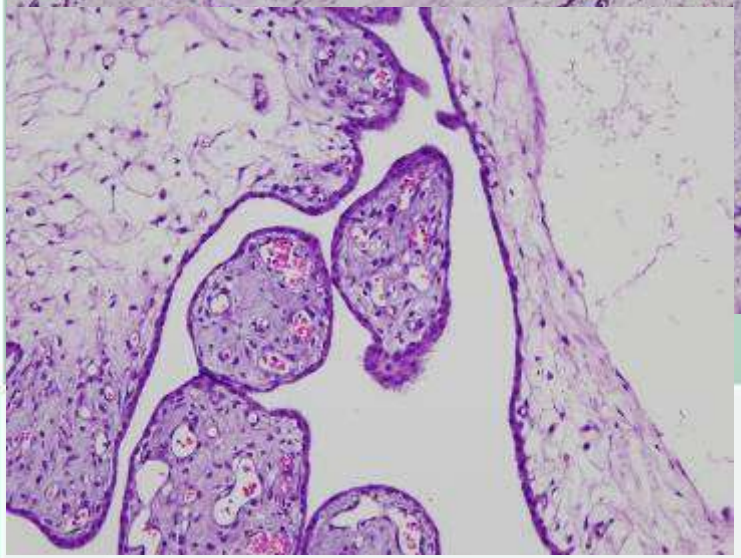
3 de 5 dan el diagnóstico de MHP

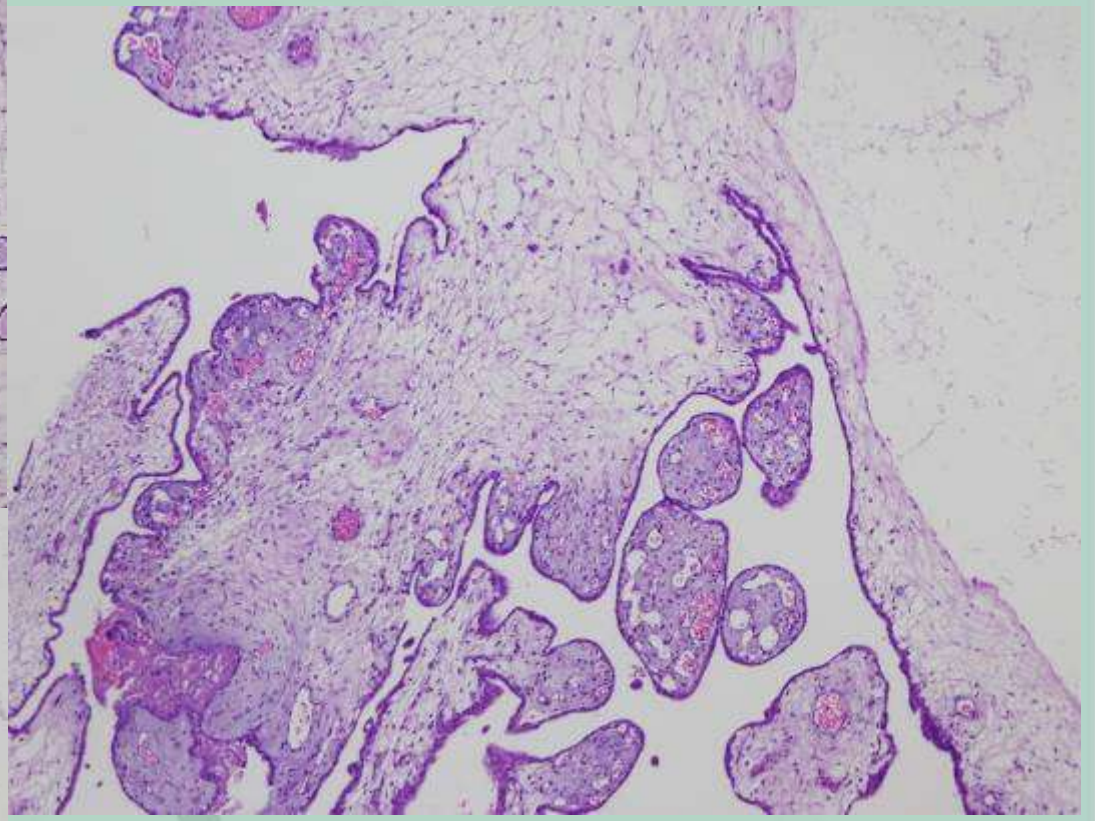
Mola parcial



MHP







16 semanas

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Mola parcial inicial

	Early partial mole n=80 (%)	Late partial mole n=20 (%)
Villous edema	80 (100)	20 (100)
Cistern formation	79 (99)	20 (100)
Focal syncytiotrophoblastic hyperplasia	80 (100)	20 (100)
Villous scalloping	80 (100)	20 (100)
Trophoblastic inclusion	79 (99)	20 (100)
Nucleated red blood cells	57 (71)	15 (75)
Fetal parts	15 (19)	3 (15)
Fetal blood vessels	67 (84)	19 (95)
Extensive stromal fibrosis	2 (3)§	9 (45)§
Wandering trophoblast	32 (40)	9 (45)
Maximal size of villi (mm)[a]	1.2–6.2	1.5–6.5
Mean size of villi (mm)[a]	3.0 § §	3.4 § §

+ Dimorfismo vellositario

MHP inicial = MHP clásica

Fukunaga Virchows Arch (2000) 437:180-4

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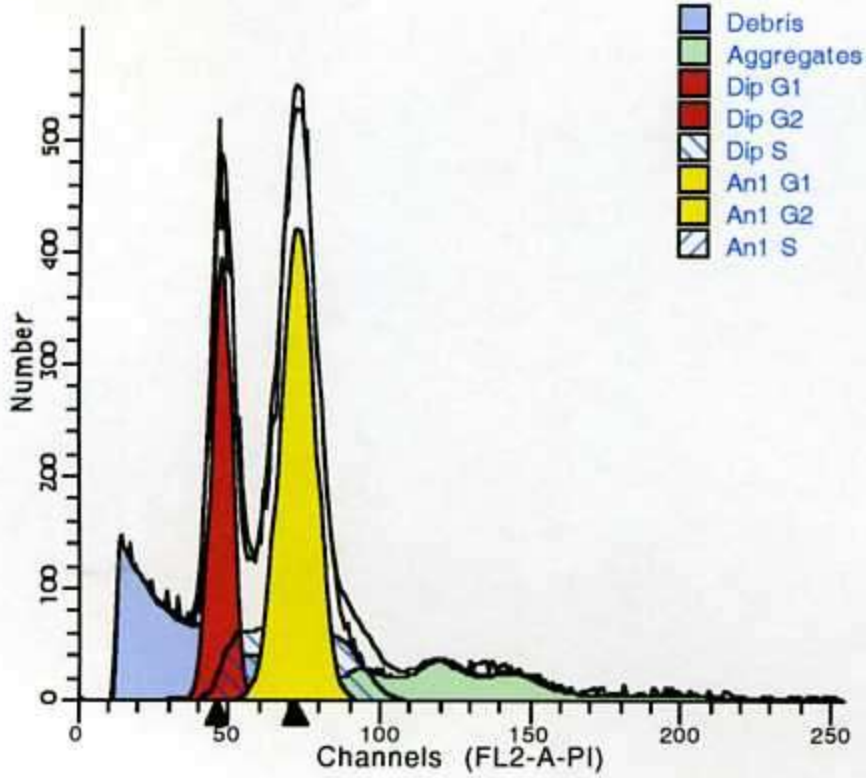


File analyzed: B09_06105-3.034
Date analyzed: 3-Apr-2009
Model: 2DA0n_DSD_ASF
Analysis type: Manual analysis

Diploid: 50.74 %
Dip G1: 52.35 % at 47.17
Dip G2: 0.00 % at 94.35
Dip S: 47.65 % G2/G1: 2.00
%CV: 7.03

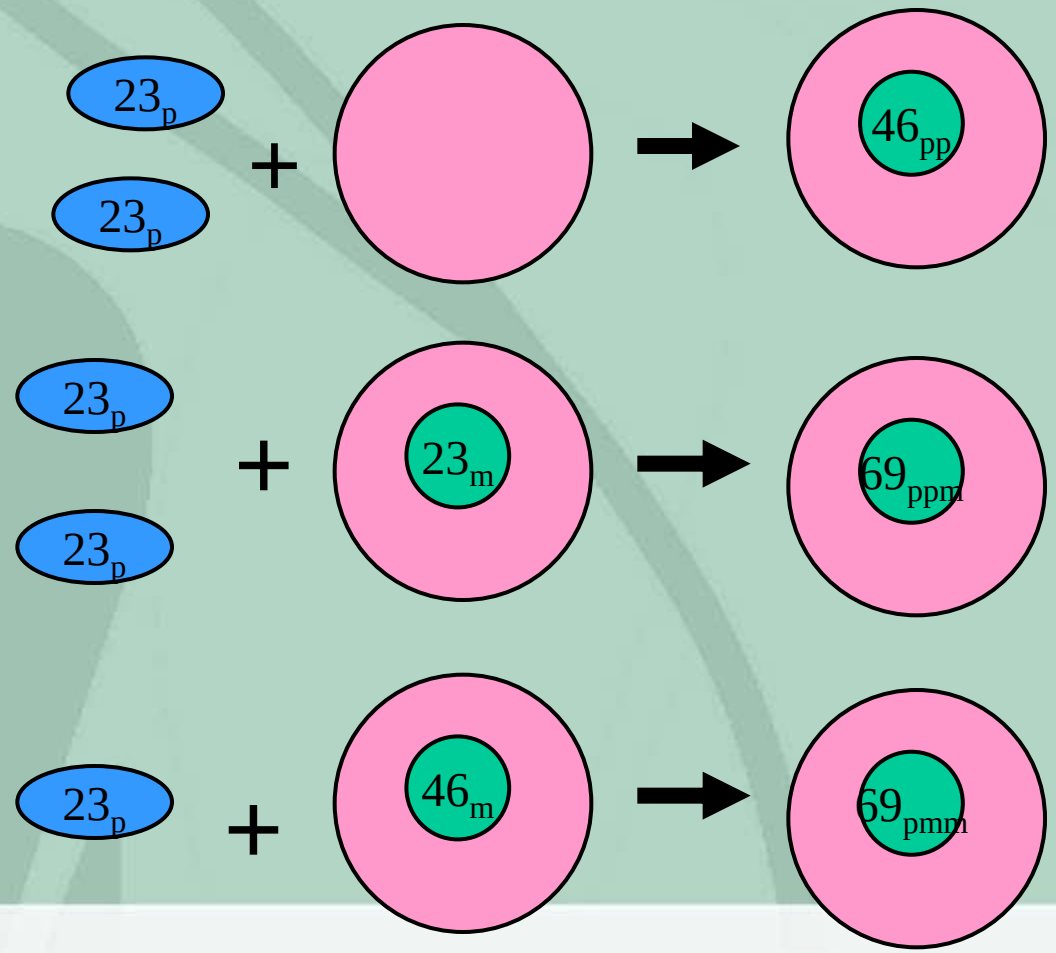
Aneuploid 1: 49.26 %
An1 G1: 99.90 % at 72.41
An1 G2: 0.00 % at 96.69
An1 S: 0.10 % G2/G1: 1.34
%CV: 7.97 DI: 1.53

Total Aneuploid S-Phase: 0.10 %
Total S-Phase: 24.22 %
Total B.A.D.: 16.39 %

Debris: 23.75 %
Aggregates: 12.96 %
Modeled events: 19591
All cycle events: 12398
Cycle events per channel: 245
RCS: 3.268

Triploidia digínica

Aneuploidias



Diploidia diándrica

MC

Placenta sin embrión

Triploidia diándrica

MP

Placenta predomina sobre embrión

Triploidia digínica

Hipoplasia placentaria

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Origen de la triploidia y fenotipo

Table 5

Parental Origin and Phenotype of Triploidy

Origin	Total No. of Cases	Gross Phenotypic Features			Developmental Stage (wk)			
		Partial Mole	Trophoblastic Hyperplasia	Fetal Tissue	<6.0	6.0–8.5	8.5–11.5	>11.5
Maternal	27	0 (0%)	3 (11%)	16 (59%)	6	12	6	3
Paternal	58	33 (57%)	46 (79%)	13 (22%)	3	12	25	18

NOTE.—Includes cases in which results from both the DNA analysis and histological study were available.

Zaragoza et al *Am. J. Hum. Genet. 66:1807–1820, 2000*

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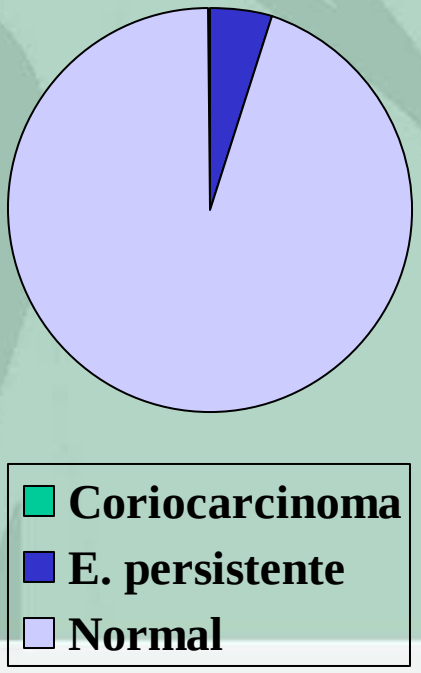
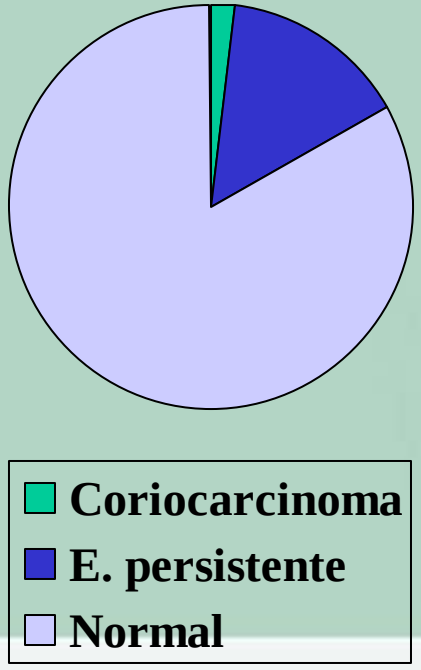
Evolución de la mola hidatiforme

Mola parcial

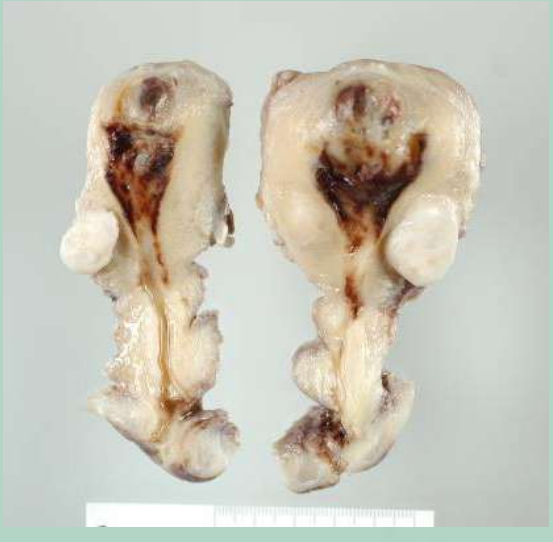


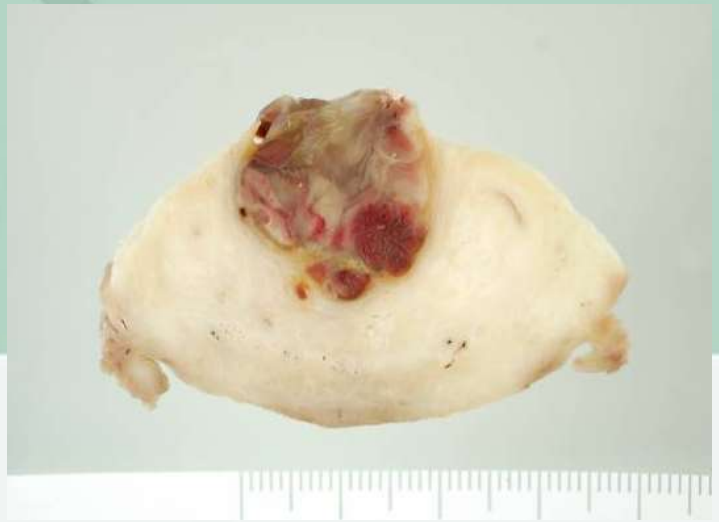
Mola completa



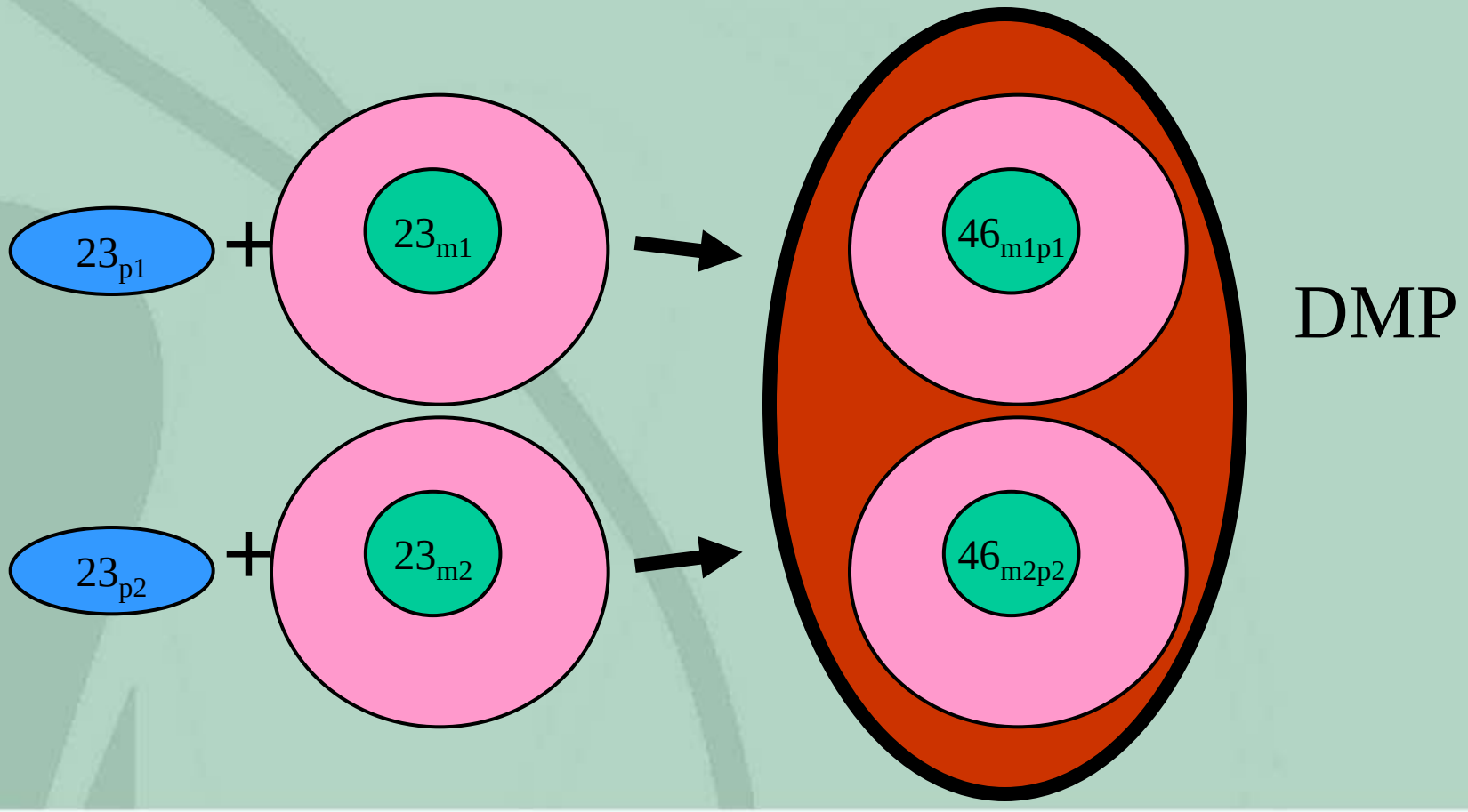
Enfermedad persistente

- Mola persistente
- Mola invasora
- Mola metastática
- Coriocarcinoma



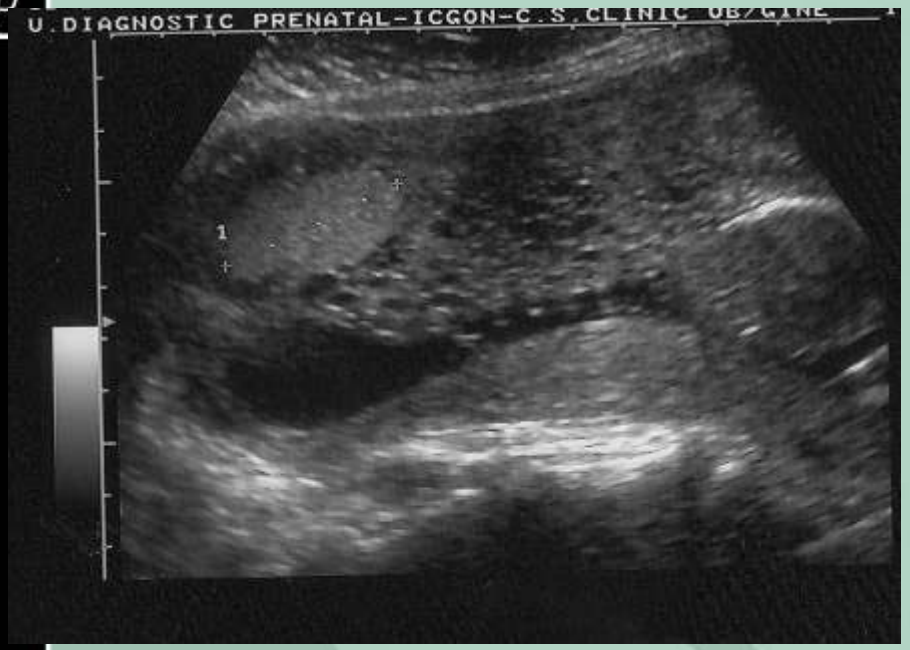


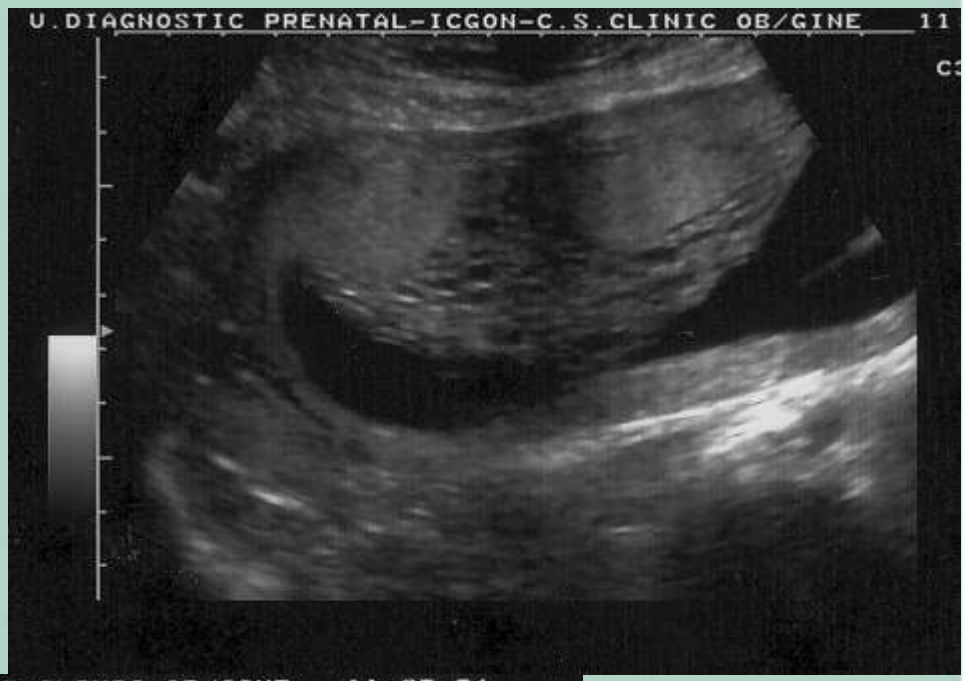
Quimerismo

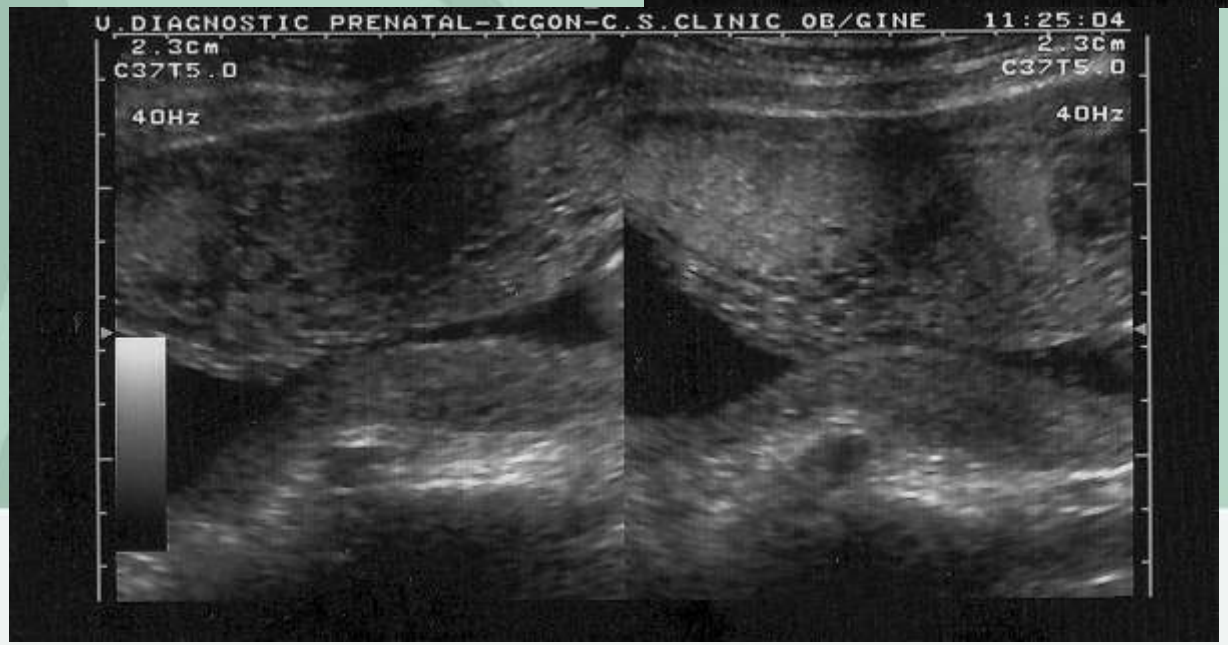


Displasia mesenquimática

- Placentomegalia con anomalias de las vellosidades principales
- Dilatación quística
- Vesículas
- Proliferación fibroblástica estromal
- Anomalias en cualquier tipo de vaso
- Población de vellosidades normales







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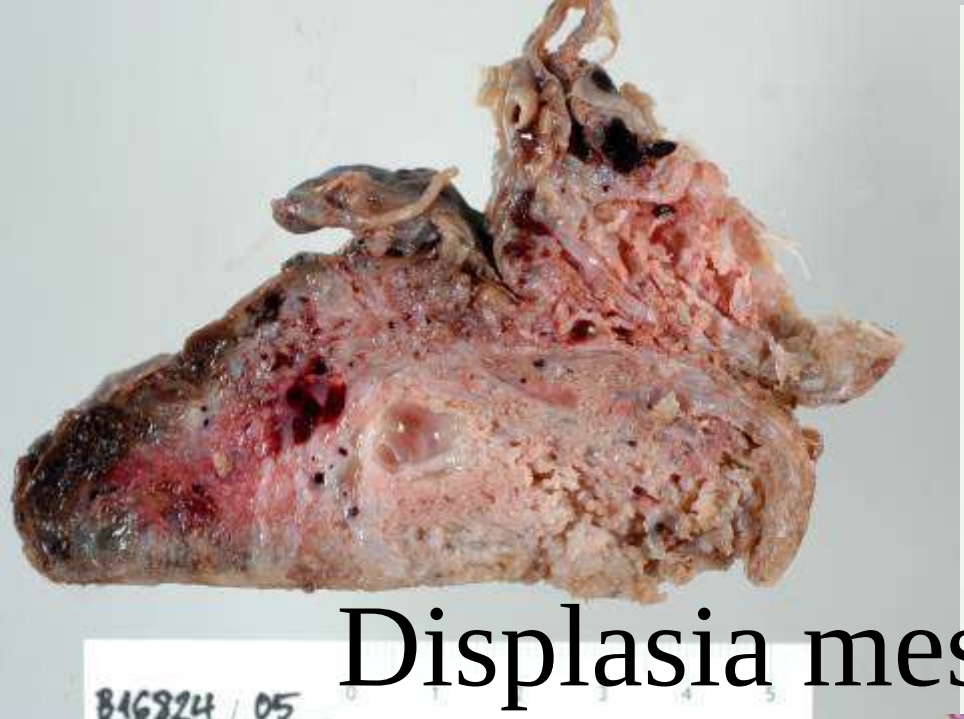
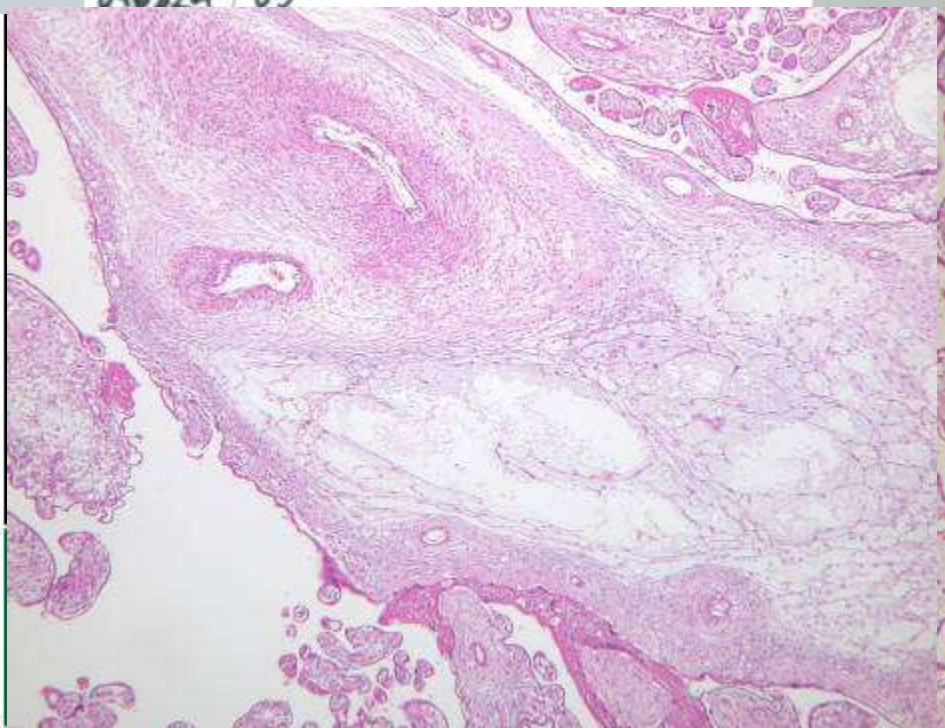
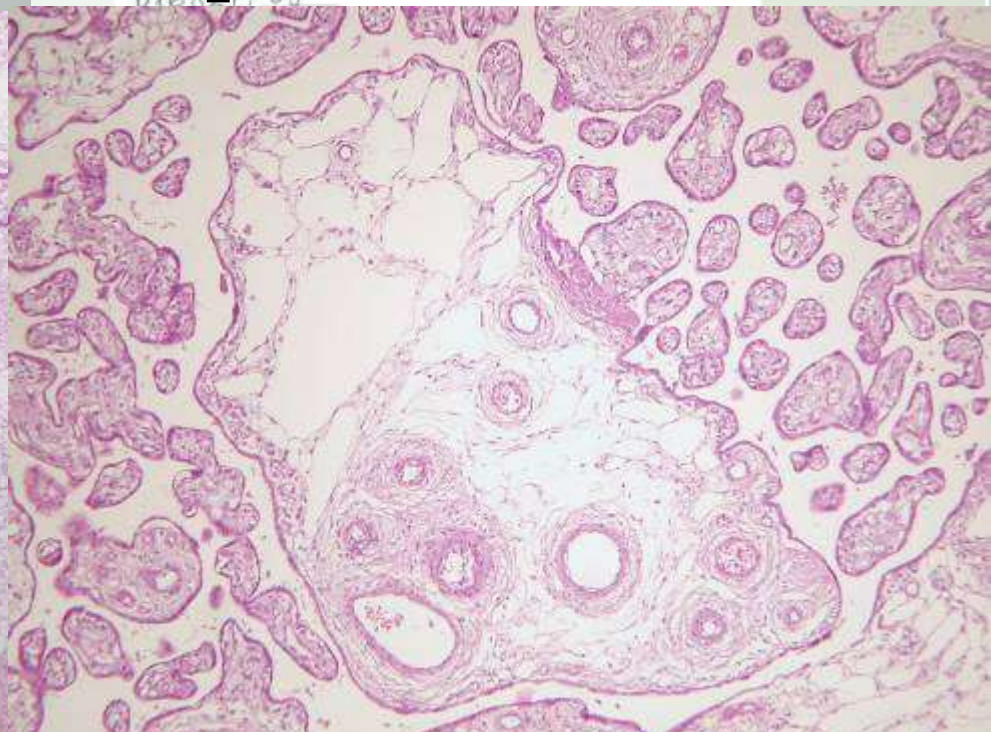
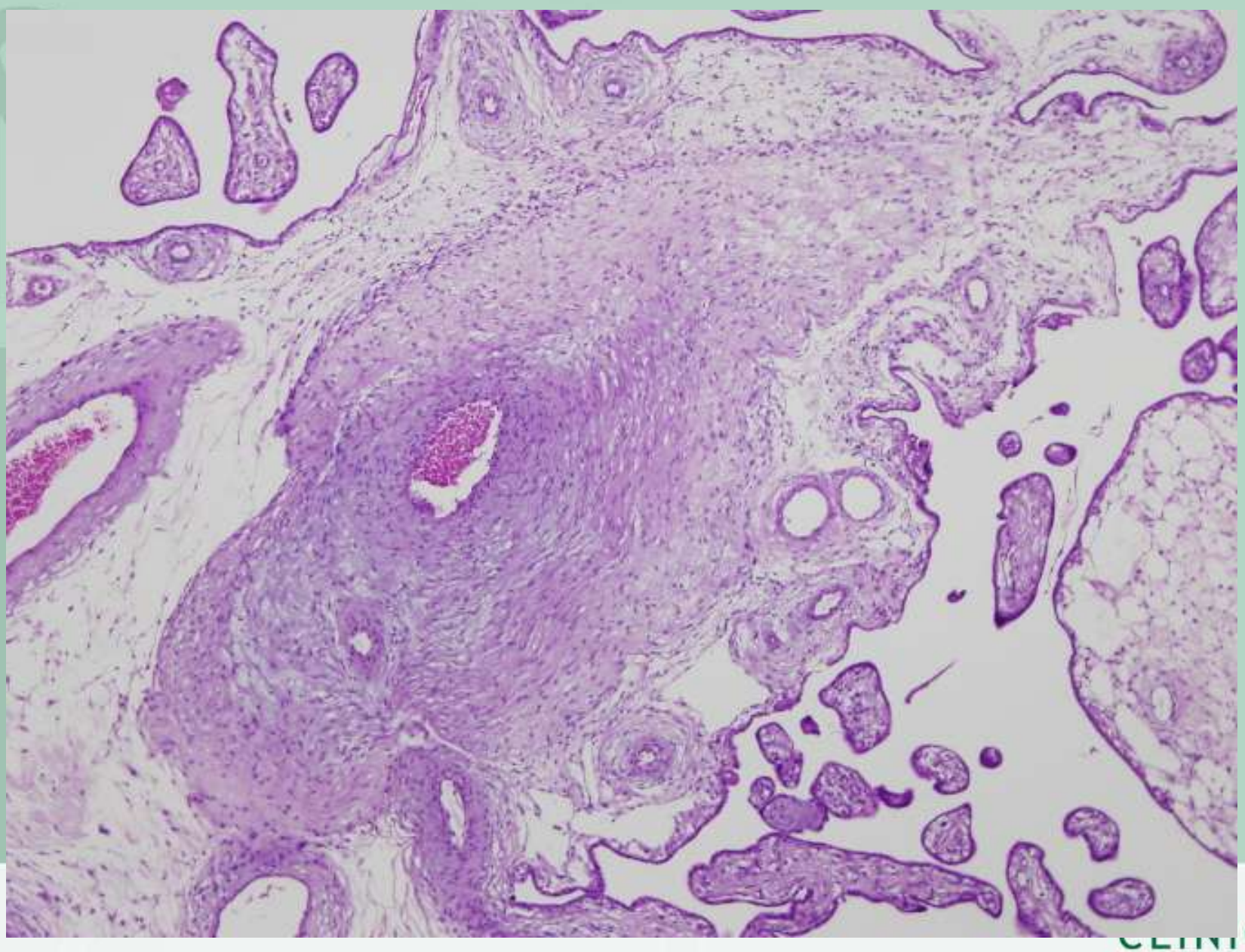
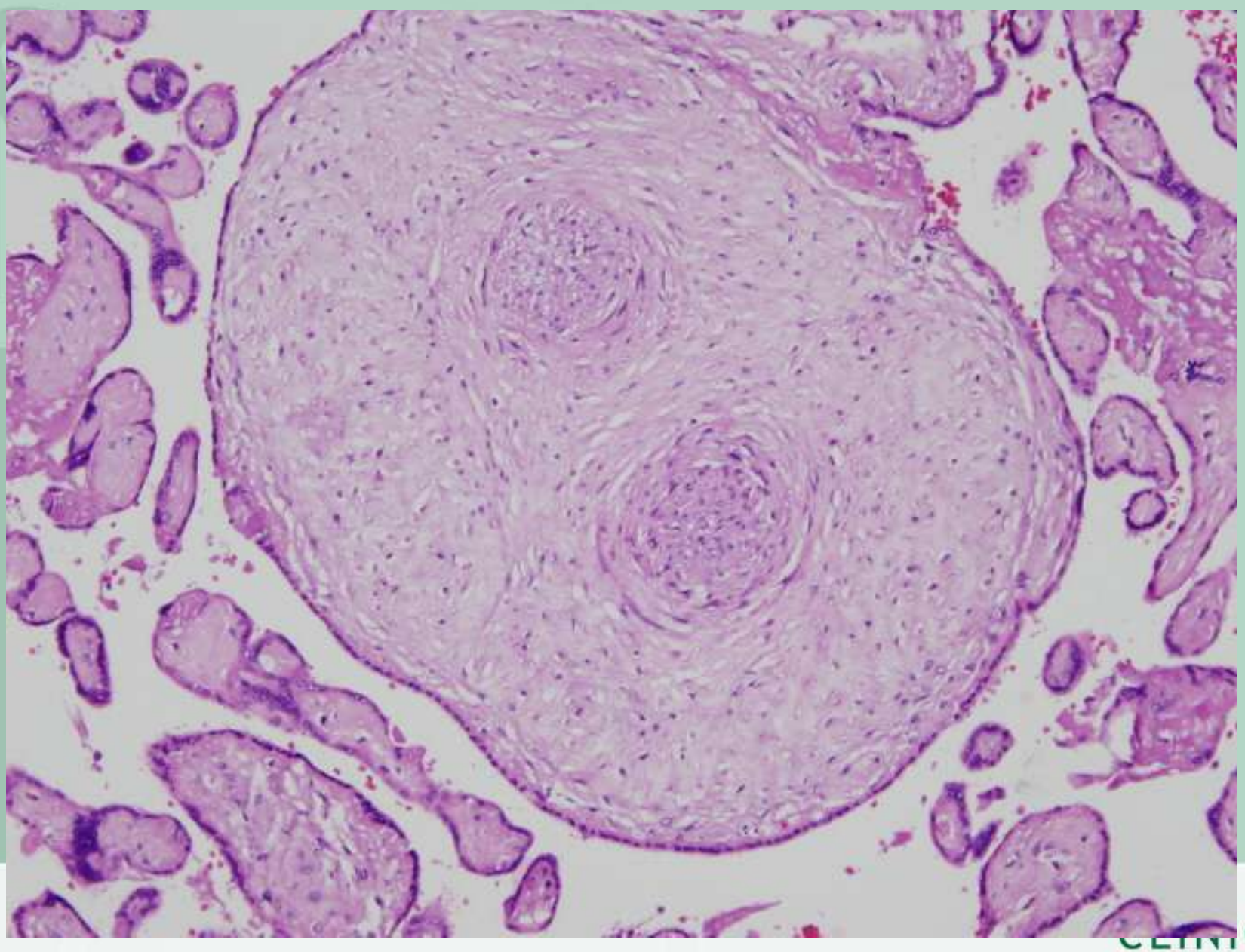


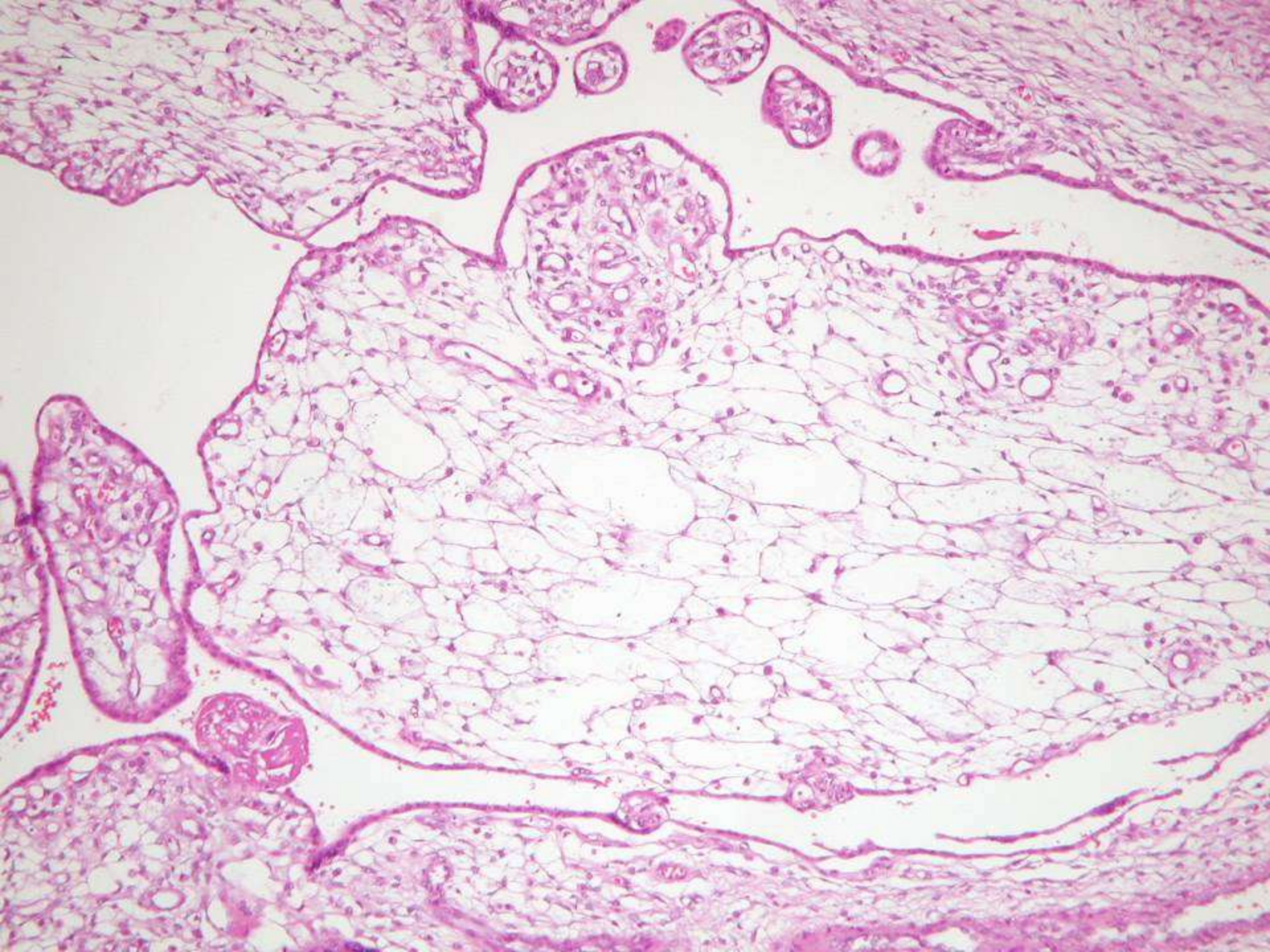
Displasia mesenquimática

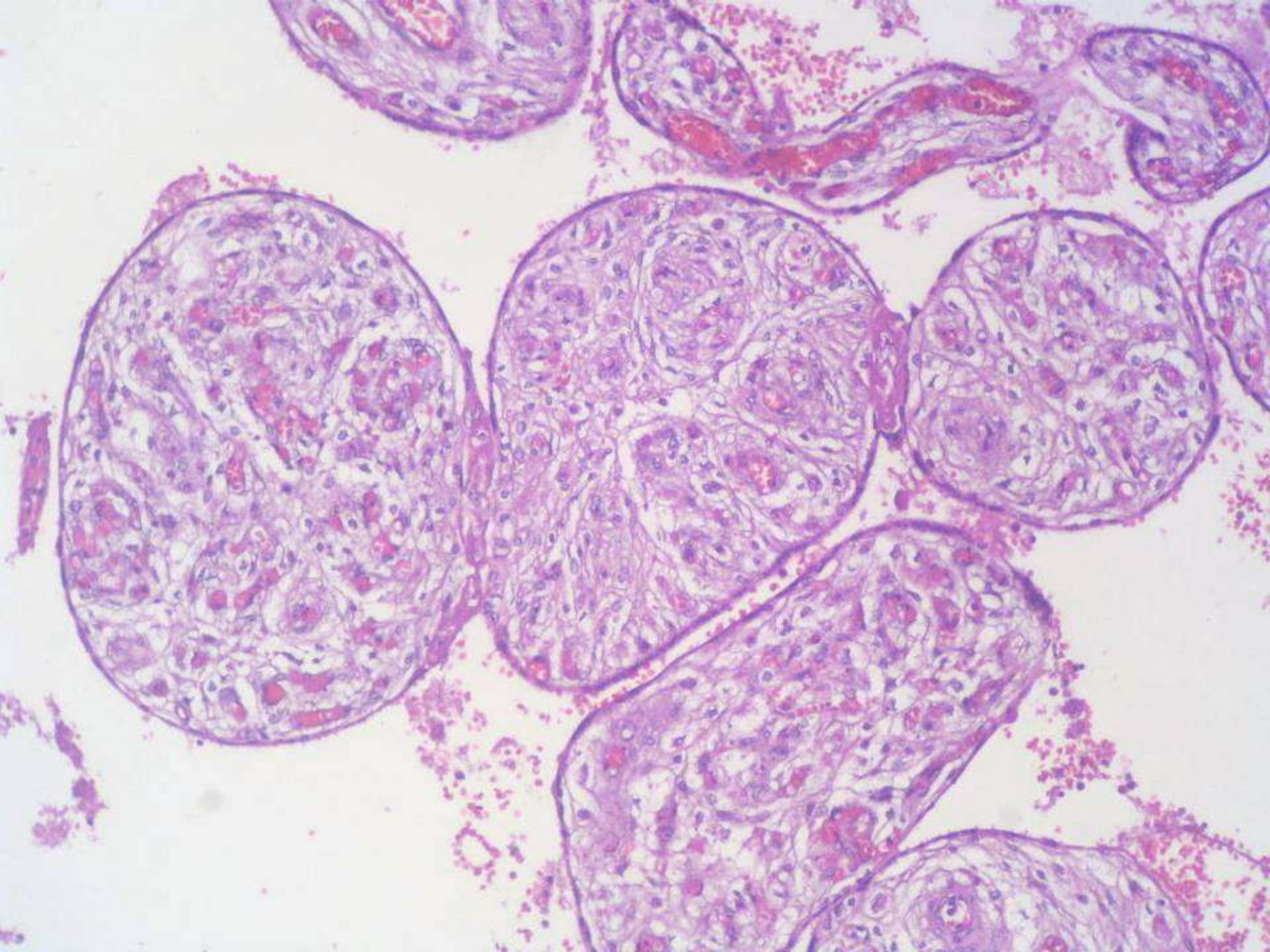


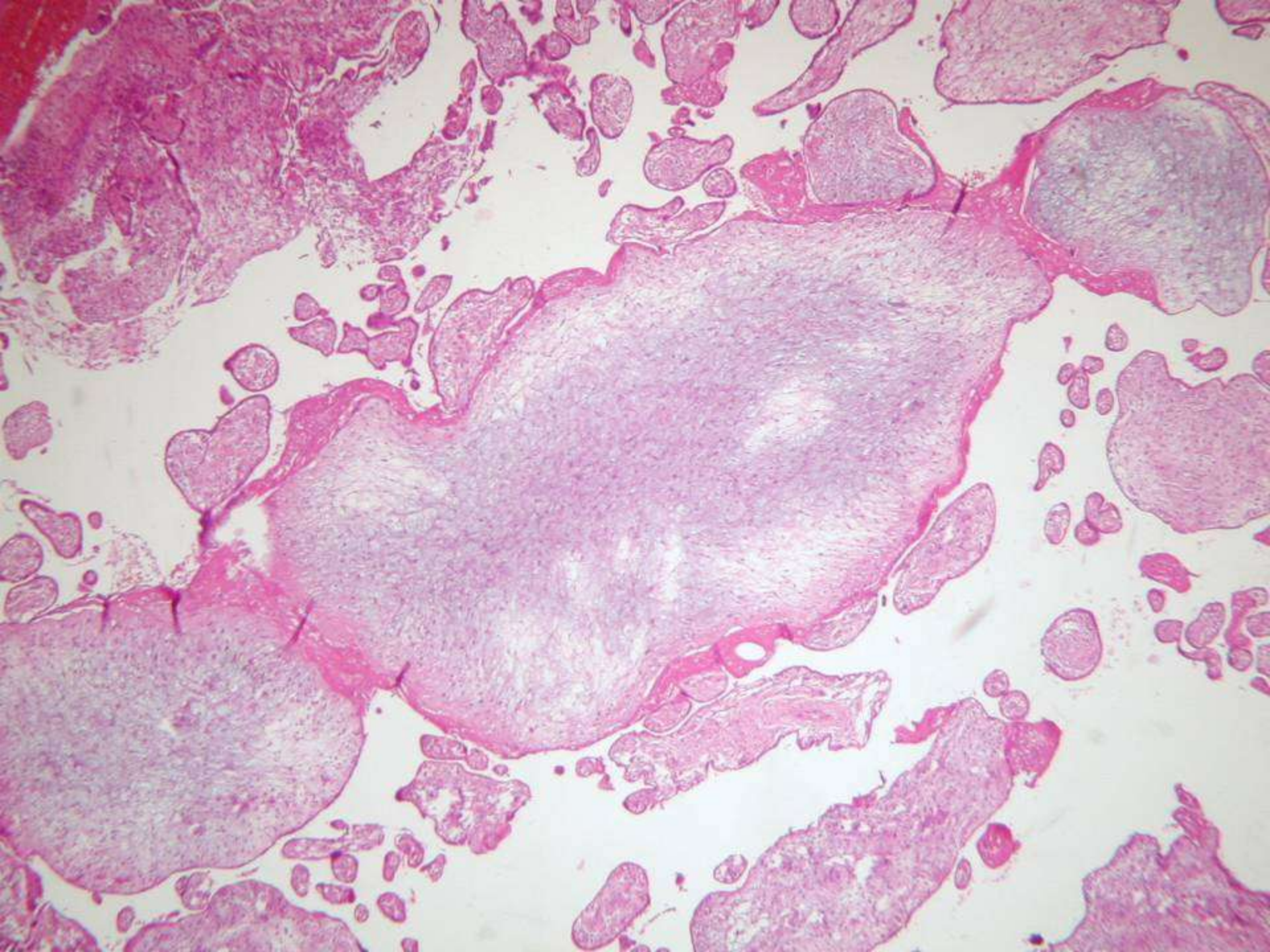






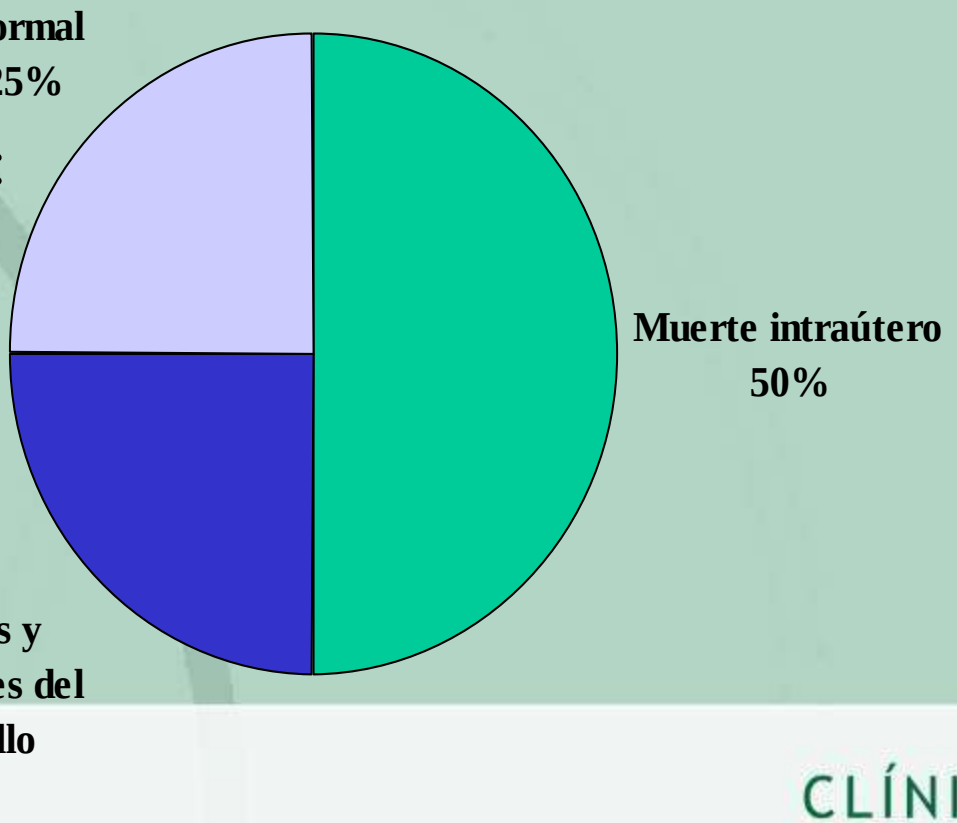






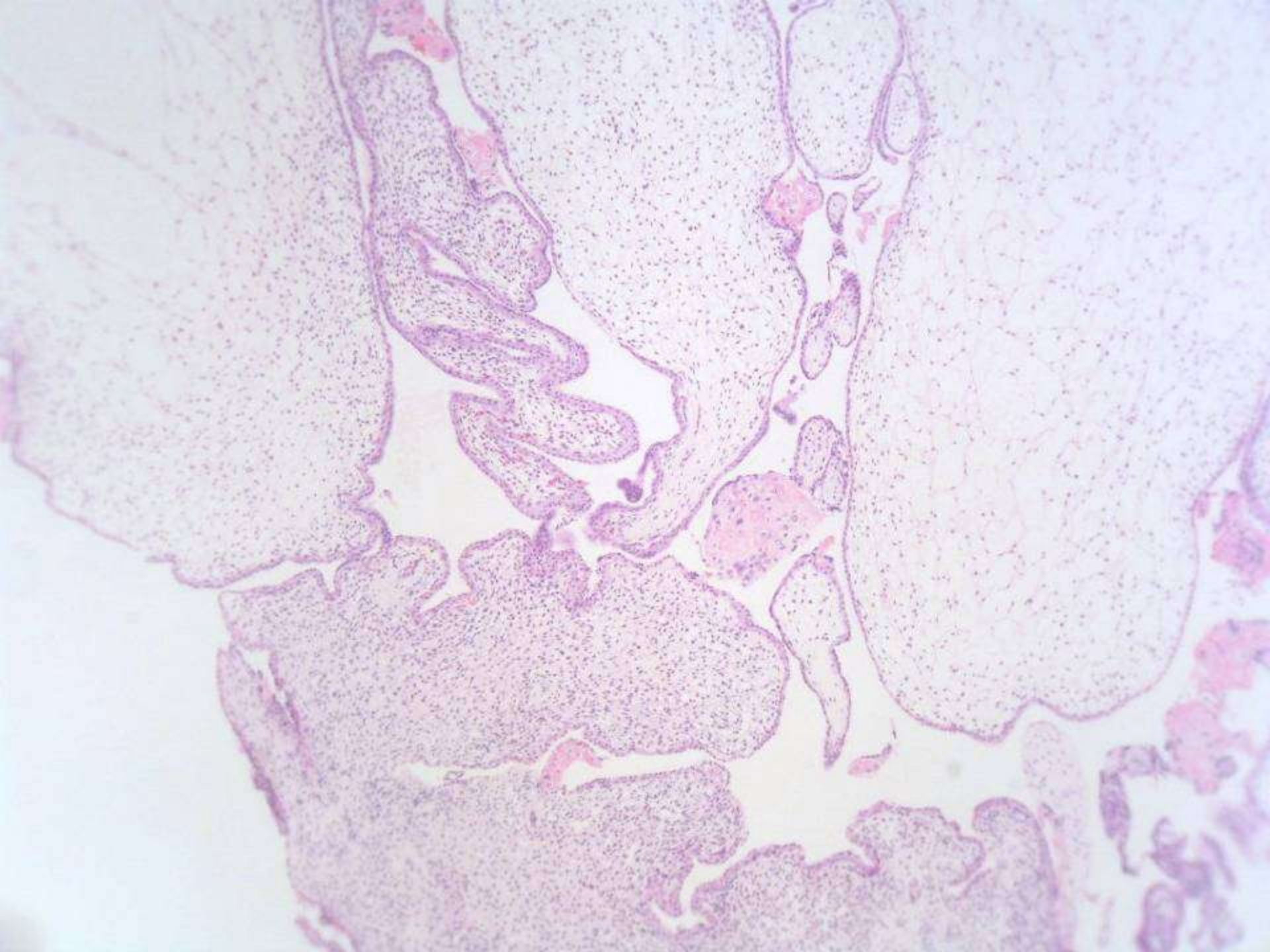
DMP en el 1er trimestre

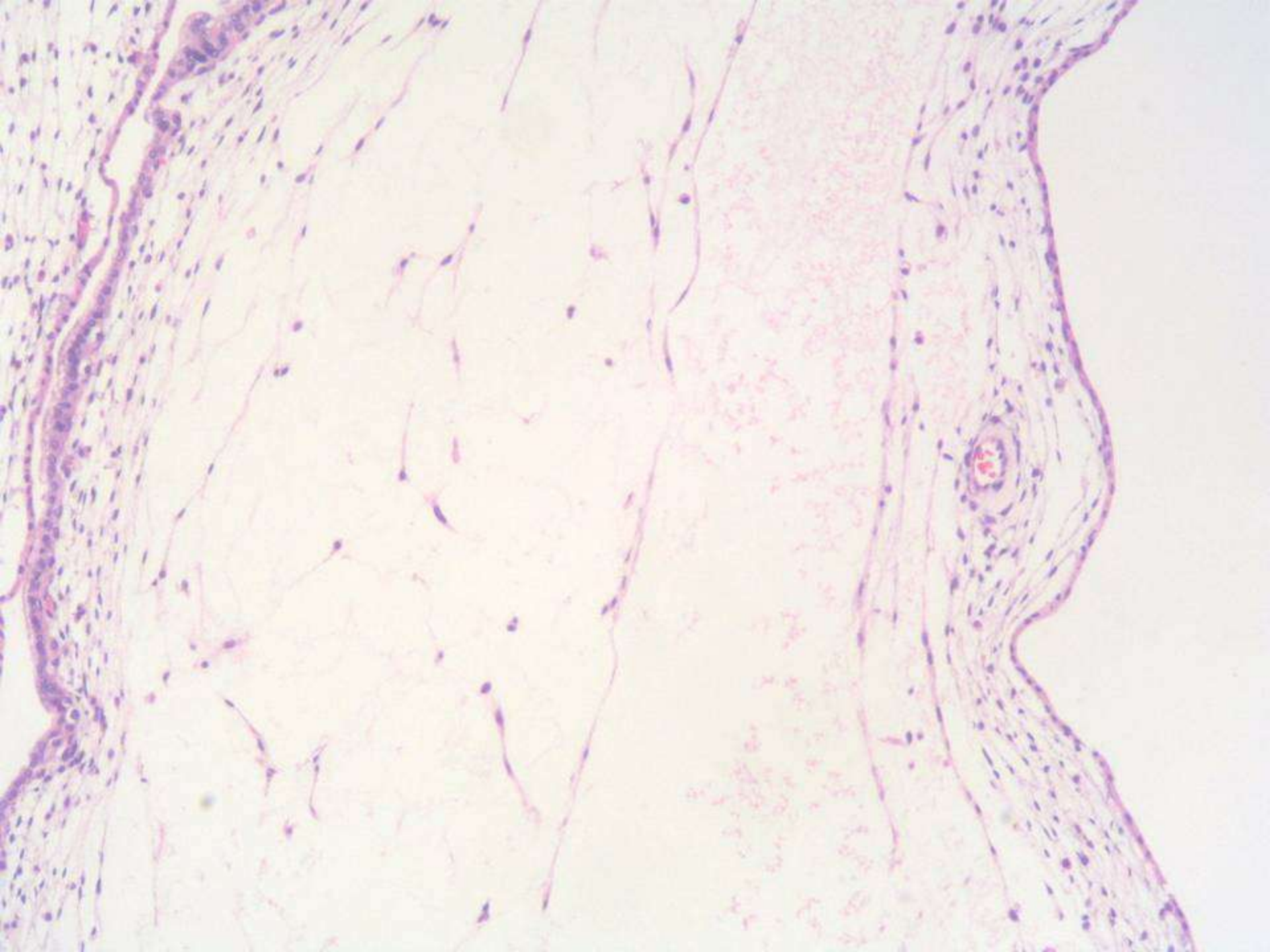
DD con MHP

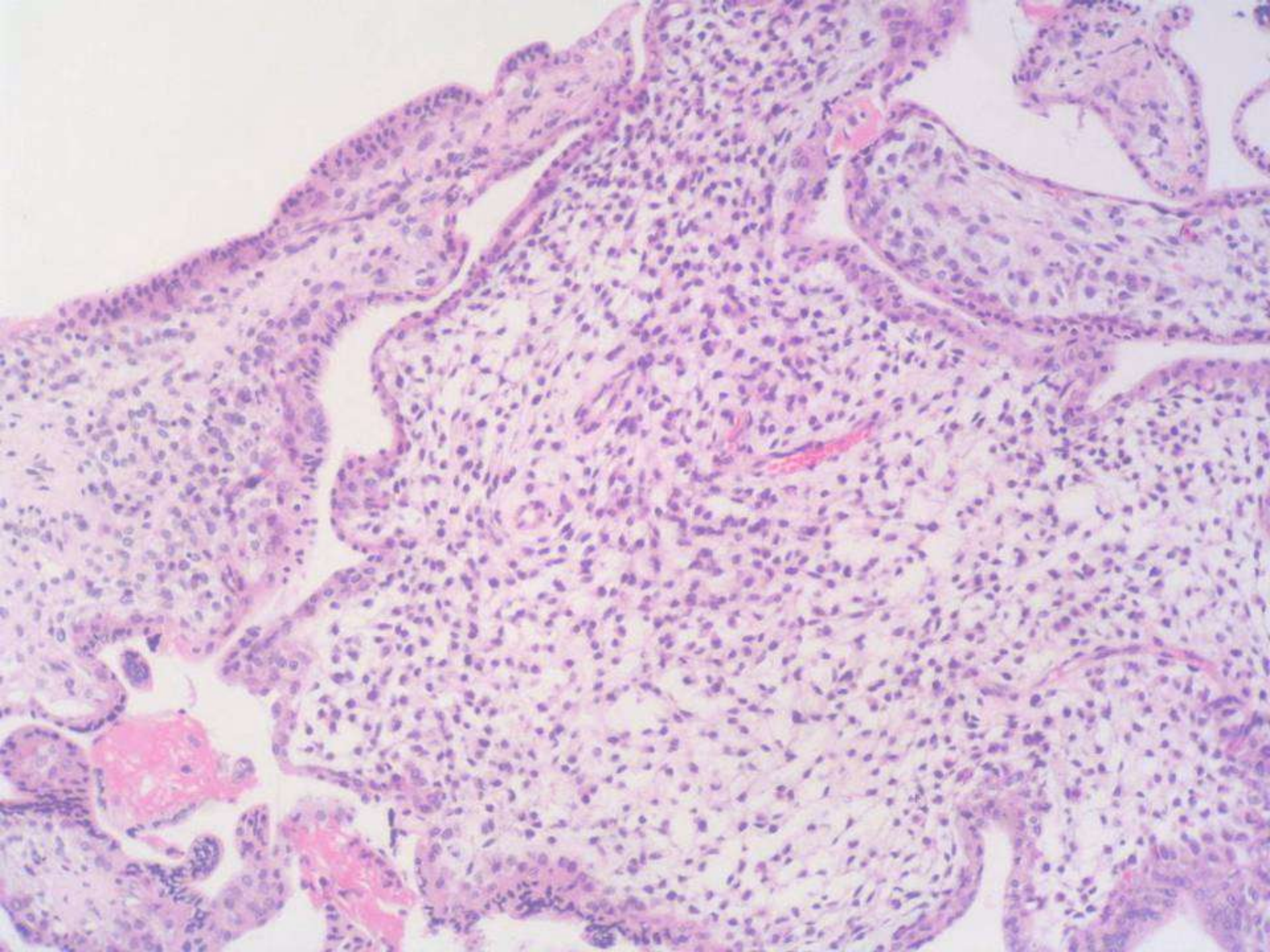


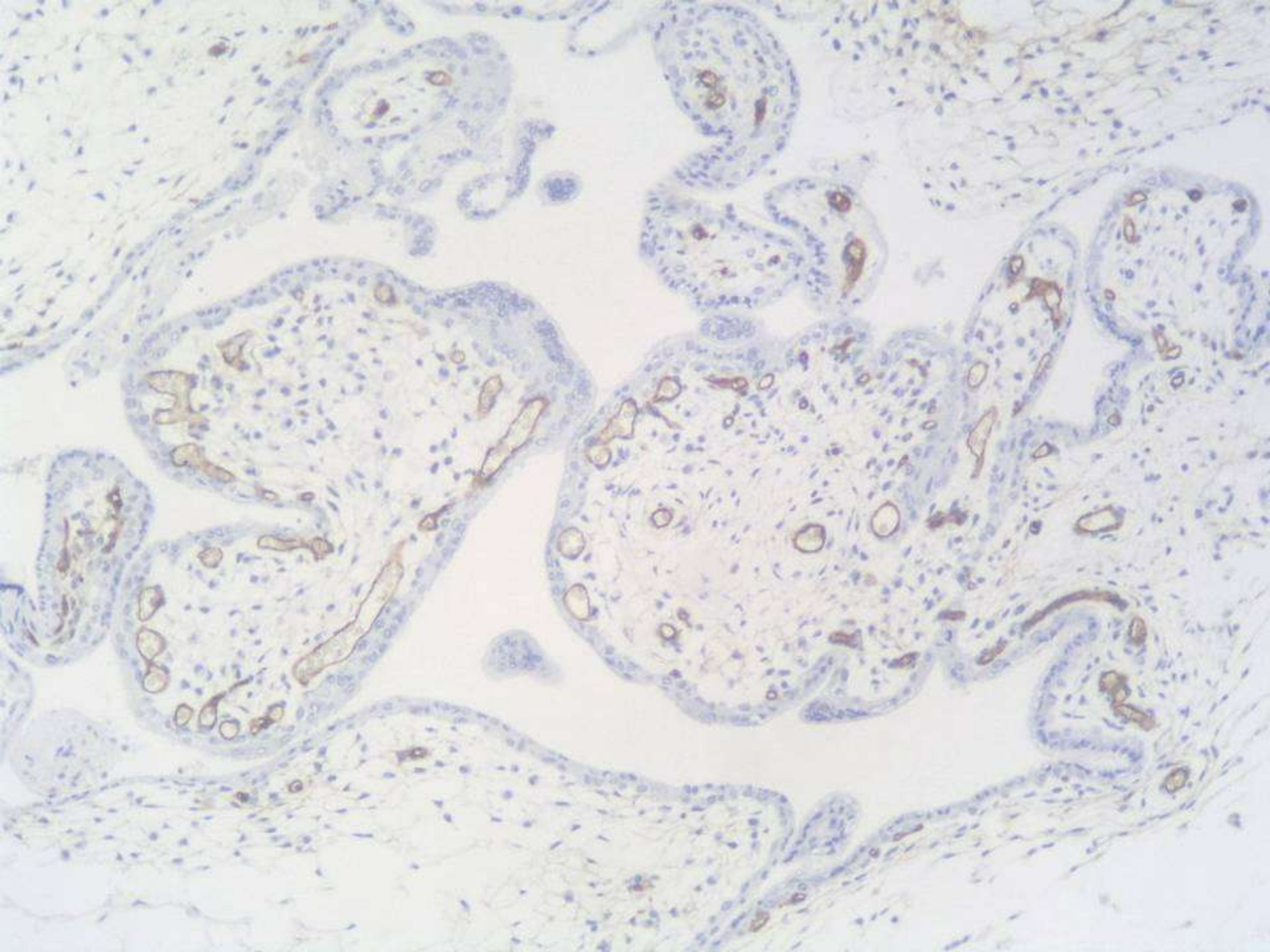
Evolución:

Dilatación quística
Vesículas
Proliferación fibroblástica estromal
Anomalias en cualquier tipo de vaso





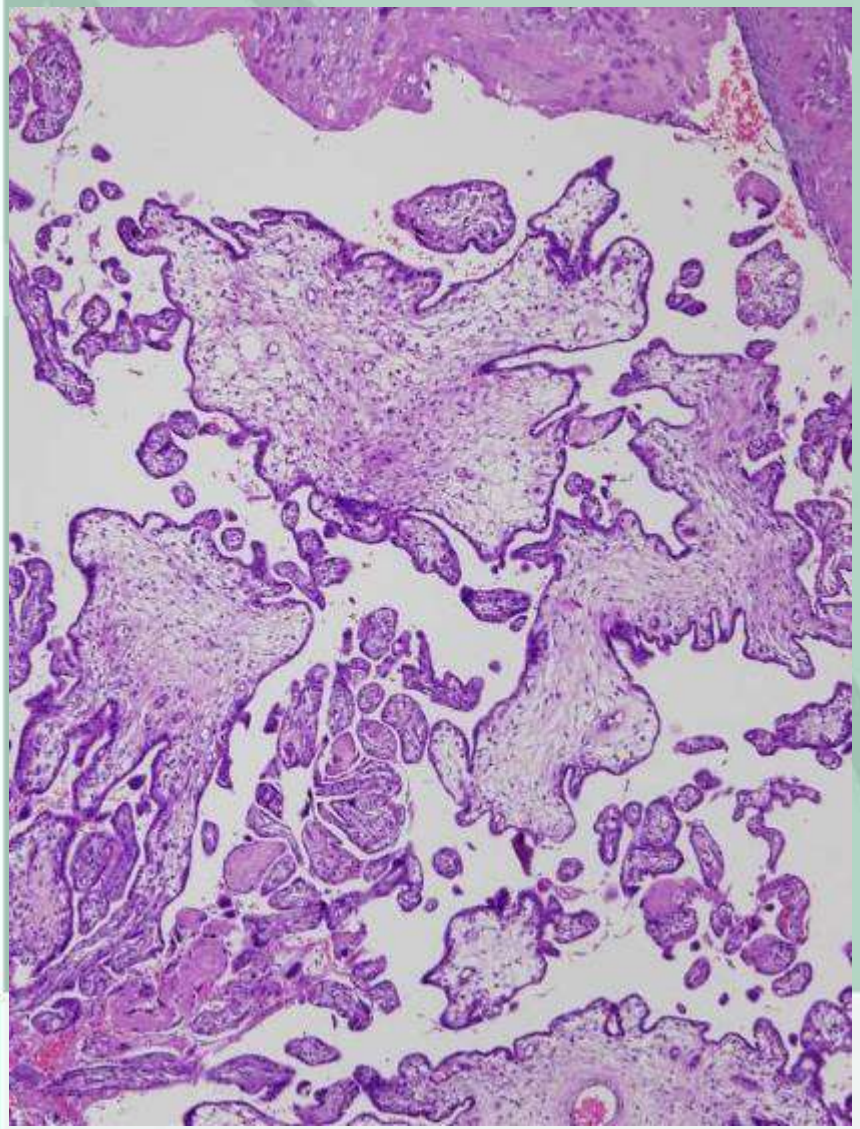


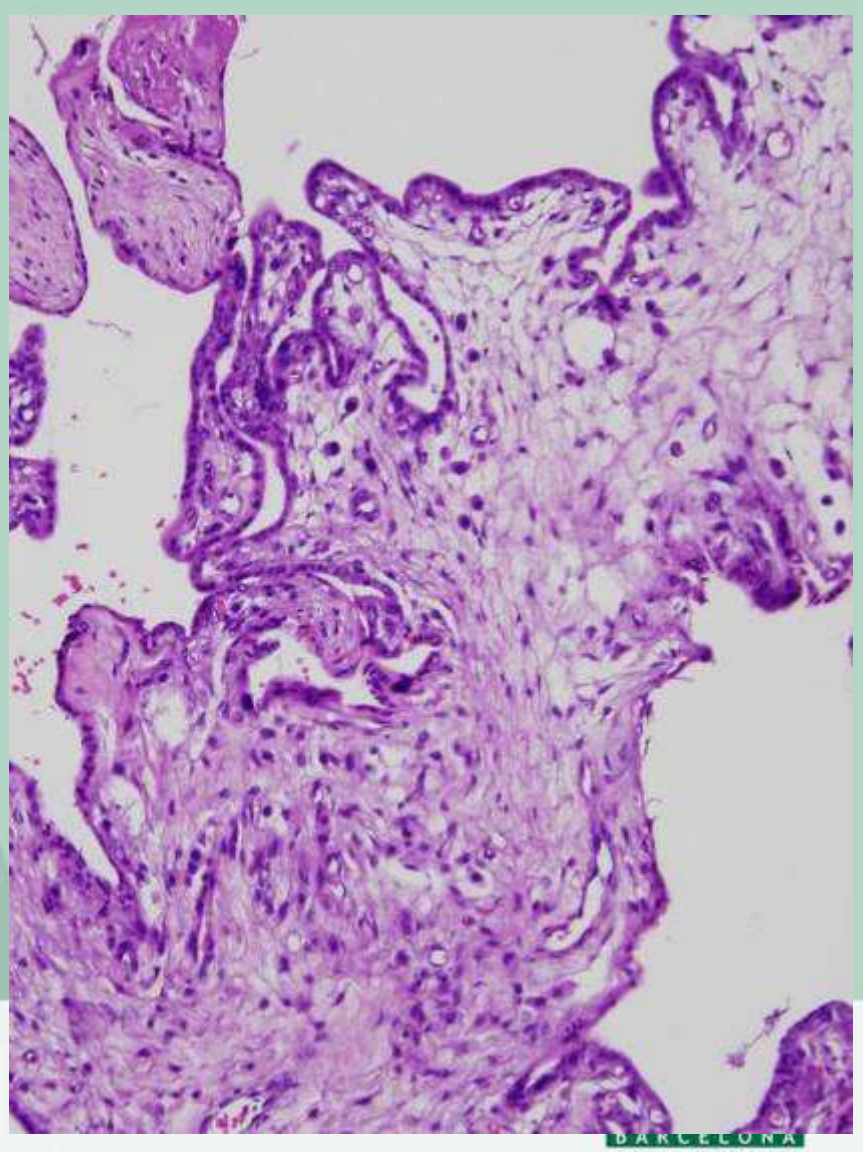


Cromosomopatias numéricas

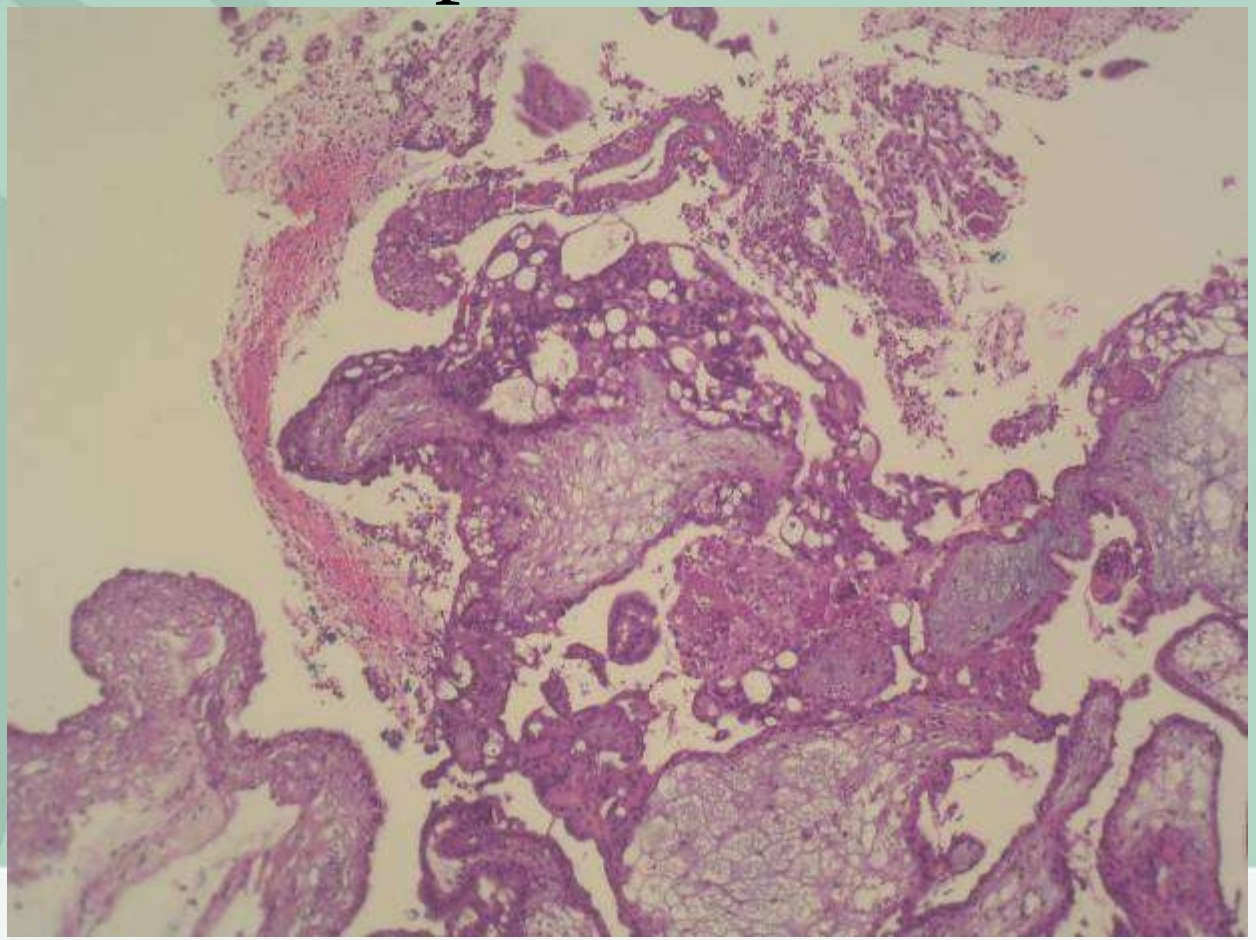
- Trisomias y monosomias no son viables
  - Excepto: 47, +21; 47, +18; 47, +13 y 45, X0
- 1ª causa de pérdida gestacional temprana
- 47, +16; 47, +22; 47, +7; etc
- Arteria umbilical única
- Retraso del crecimiento
- Alteraciones morfológicas vellositarias

Vellosidades dismórficas



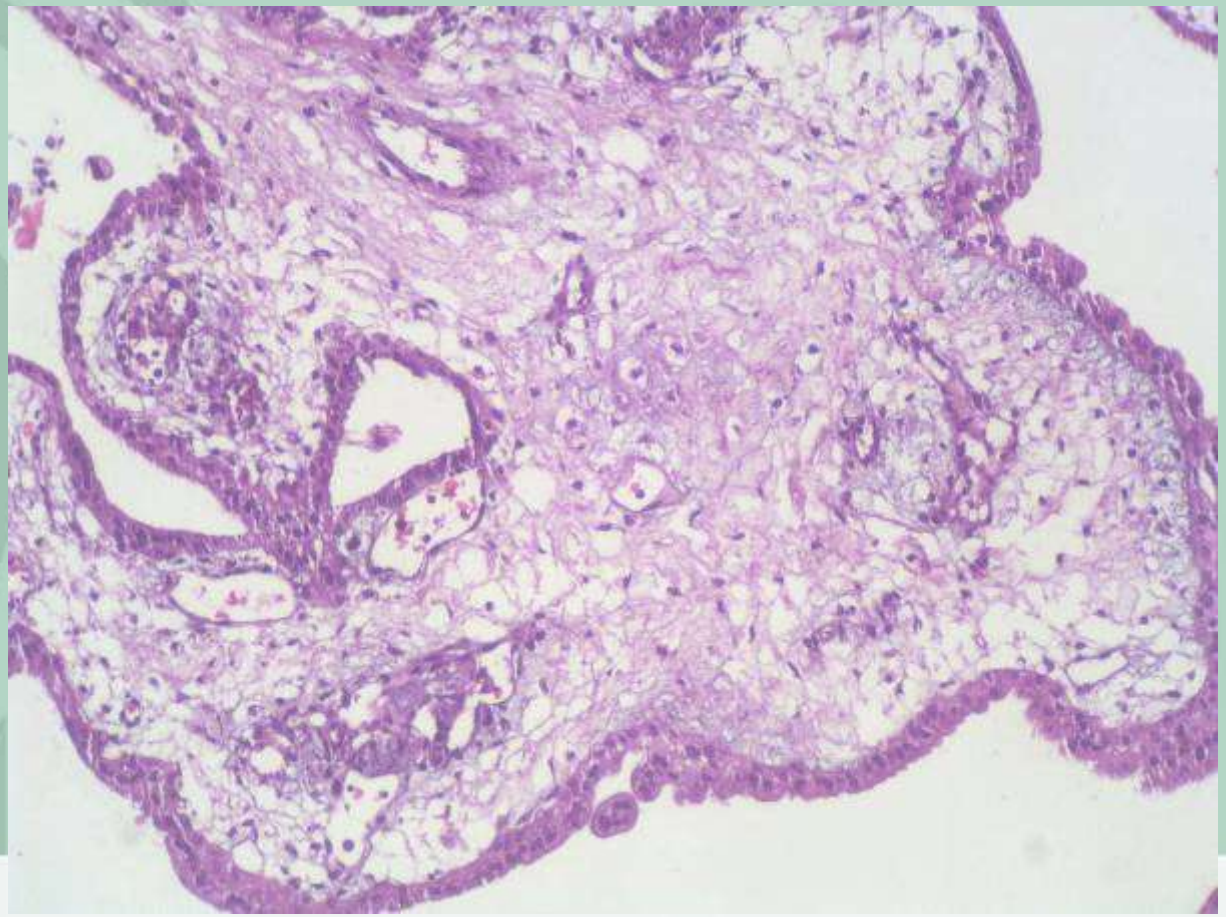


Hiperplasia trofoblástica no específica



47, +7
47, +15
47, +21
47, +22

Vellosidades dismórficas proliferación capilar



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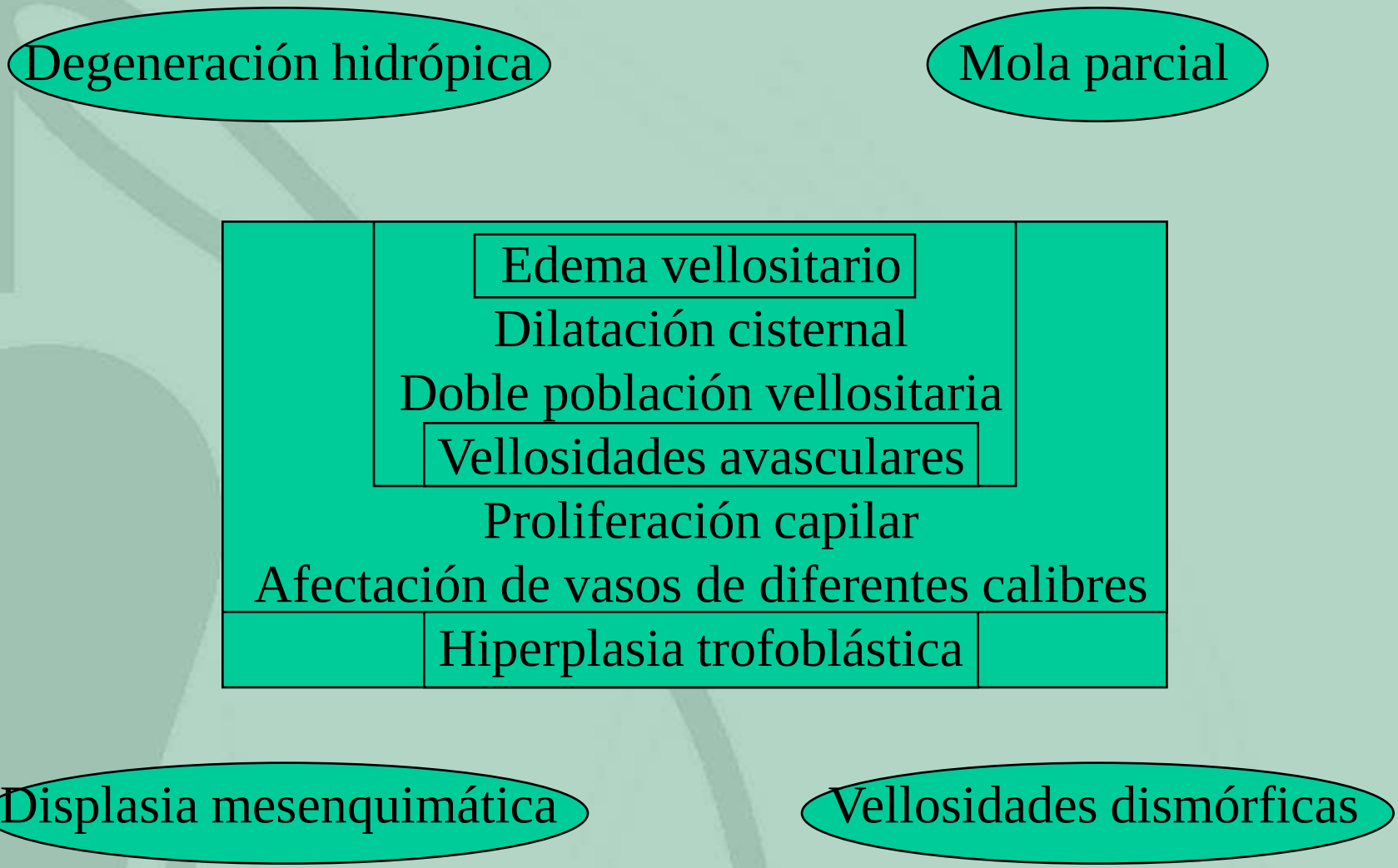
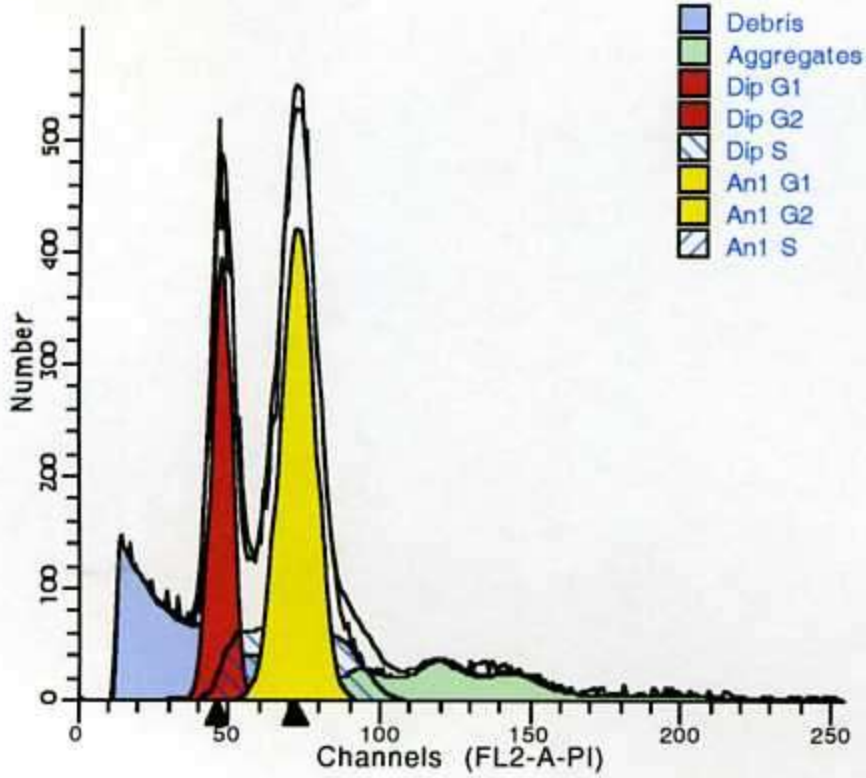

Degeneración hidrópica
Mola parcial
Edema vellositario
Dilatación cisternal
Doble población vellositaria
Vellosidades avasculares
Proliferación capilar
Afectación de vasos de diferentes calibres
Hiperplasia trofoblástica
Displasia mesenquimática
Vellosidades dismórficas

Técnicas auxiliares

- Cariotipo
- Requiere células vivas
  - Triploide: MP
  - Trisómico: Vellosidades dismórficas
- PCR cuantitativa fluorescente (QF-PCR)
  - Depende de los “primers”
- Citometria
- IHQ ($p57^{kip2}$)



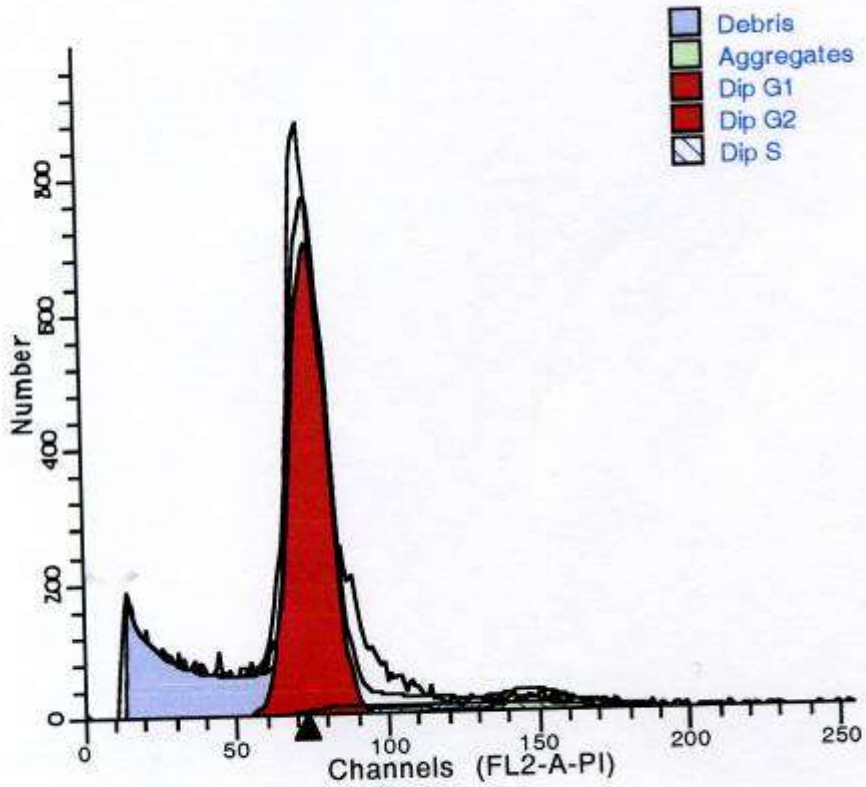
File analyzed: B09_06105-3.034
Date analyzed: 3-Apr-2009
Model: 2DA0n_DSD_ASF
Analysis type: Manual analysis

Diploid: 50.74 %
Dip G1: 52.35 % at 47.17
Dip G2: 0.00 % at 94.35
Dip S: 47.65 % G2/G1: 2.00
%CV: 7.03

Aneuploid 1: 49.26 %
An1 G1: 99.90 % at 72.41
An1 G2: 0.00 % at 96.69
An1 S: 0.10 % G2/G1: 1.34
%CV: 7.97 DI: 1.53

Total Aneuploid S-Phase: 0.10 %
Total S-Phase: 24.22 %
Total B.A.D.: 16.39 %

Debris: 23.75 %
Aggregates: 12.96 %
Modeled events: 19591
All cycle events: 12398
Cycle events per channel: 245
RCS: 3.268



File analyzed: B08/15902-1.036
Date analyzed: 12-Jan-2009
Model: 1DA0n_DSF
Analysis type: Manual analysis

Diploid: 100.00 %
Dip G1: 89.74 % at 75.04
Dip G2: 0.00 % at 163.73
Dip S: 10.26 % G2/G1: 2.18
%CV: 7.85

Total S-Phase: 10.26 %
Total B.A.D.: 18.09 %

Debris: 31.52 %
Aggregates: 5.67 %
Modeled events: 18410
All cycle events: 11564
Cycle events per channel: 129
RCS: 5.417

IHQ $p57^{kip2}$

	Citotrofoblasto	Mesenquima vellositario	Trofoblasto extravellositario	Decidua
Normal	+	+	+	+
MHP	+	+	+	+
MHC	-	-	+	+

+: >10%

Fisher et al Human Mol Genet 2002, 11: 3267

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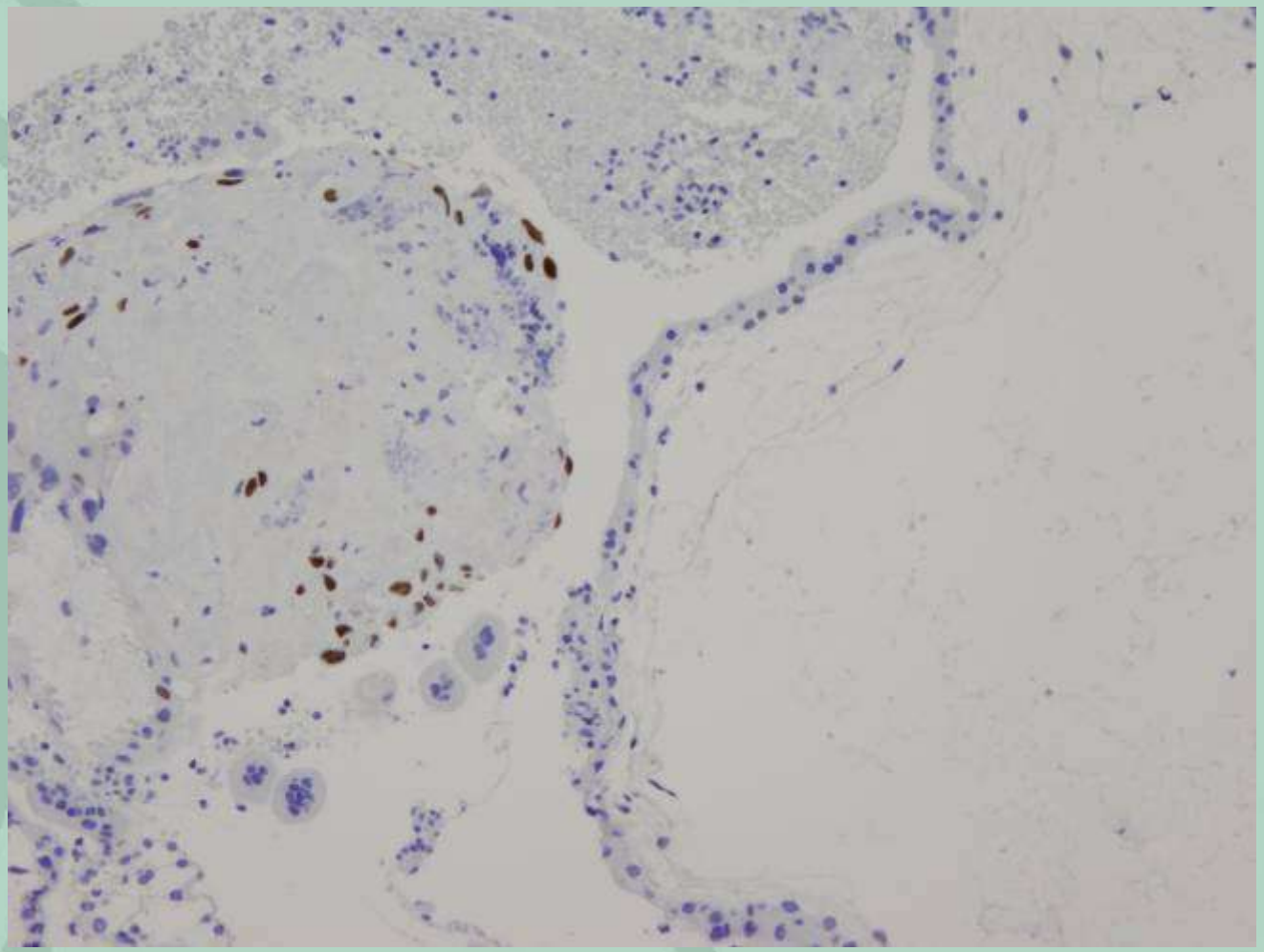


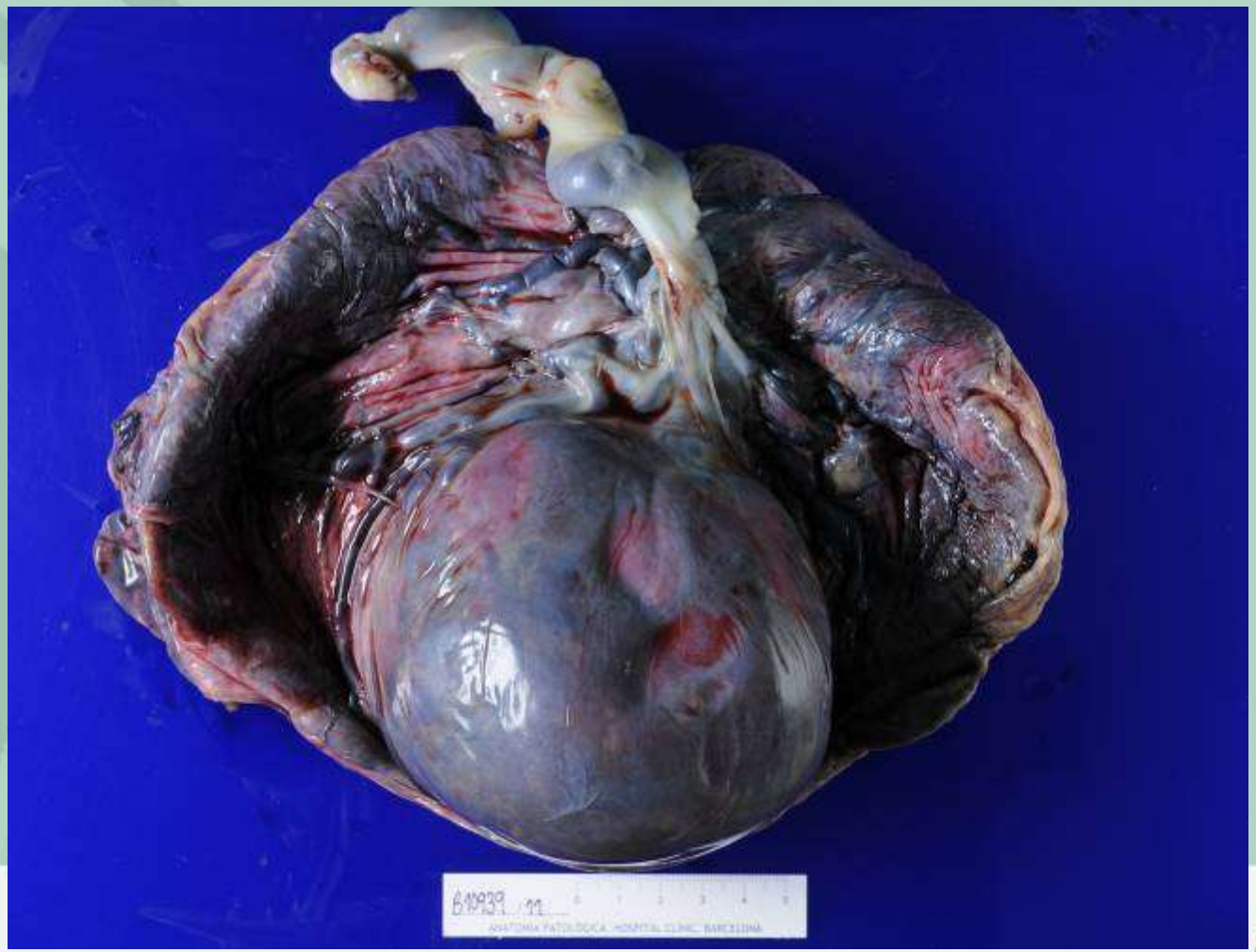
Tumores placentarios

- Primarios
  - Corioangioma
- Secundarios
  - Maternos
    - Melanoma, leucemia/linfoma, mama, pulmón
    - Enfermedad avanzada
    - Espacio intervellositario
  - Fetales
    - Neuroblastoma, leucemia
    - Intravellositarios

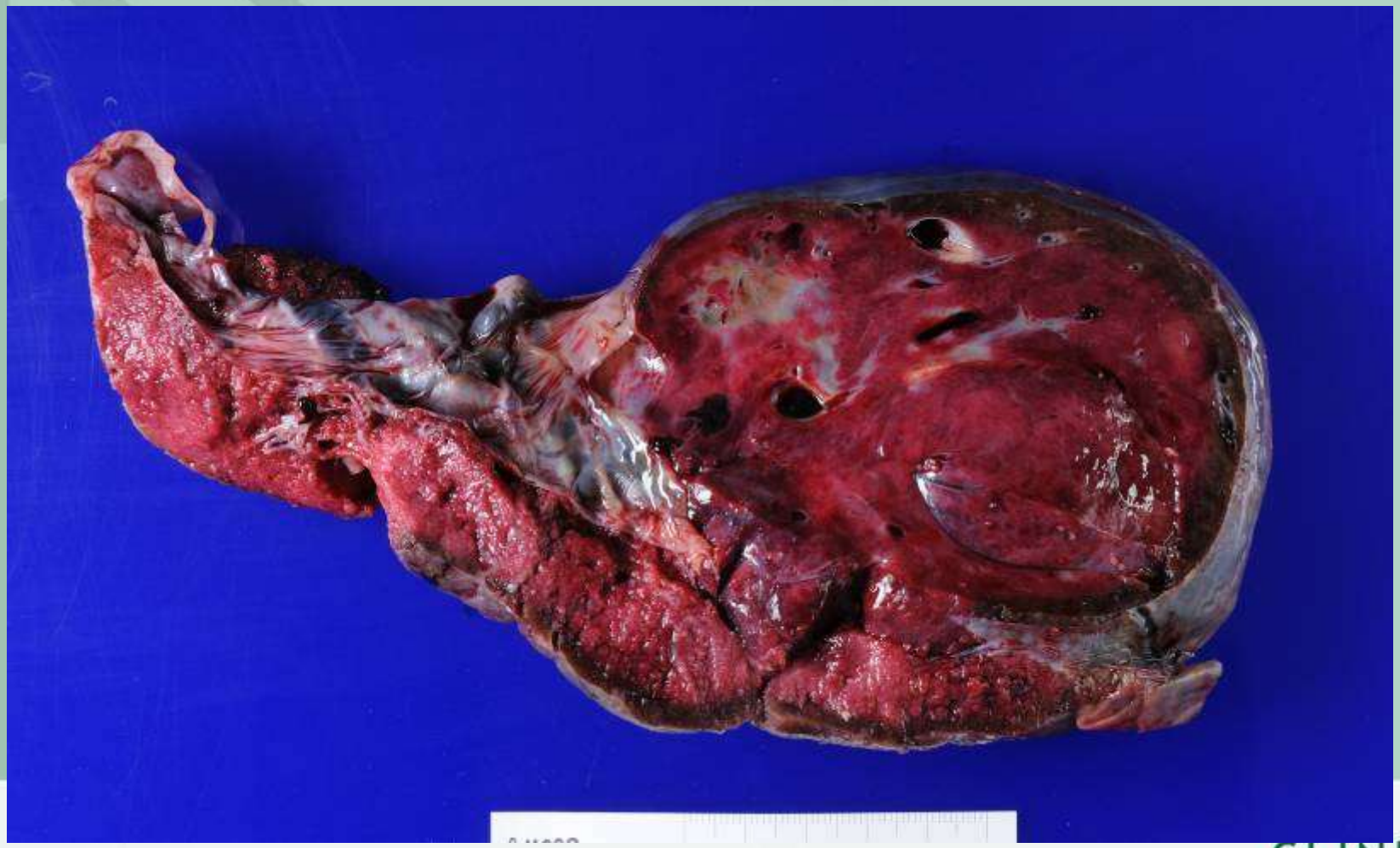
Corioangioma

- Alteración del desarrollo
- Coincidencia con hemangiomas fetales
- Celularidad capilar o estromal
- Polihidramnios, hídrops y/o muerte fetal
- Diátesis hemorrágica (secuestro plaquetario)

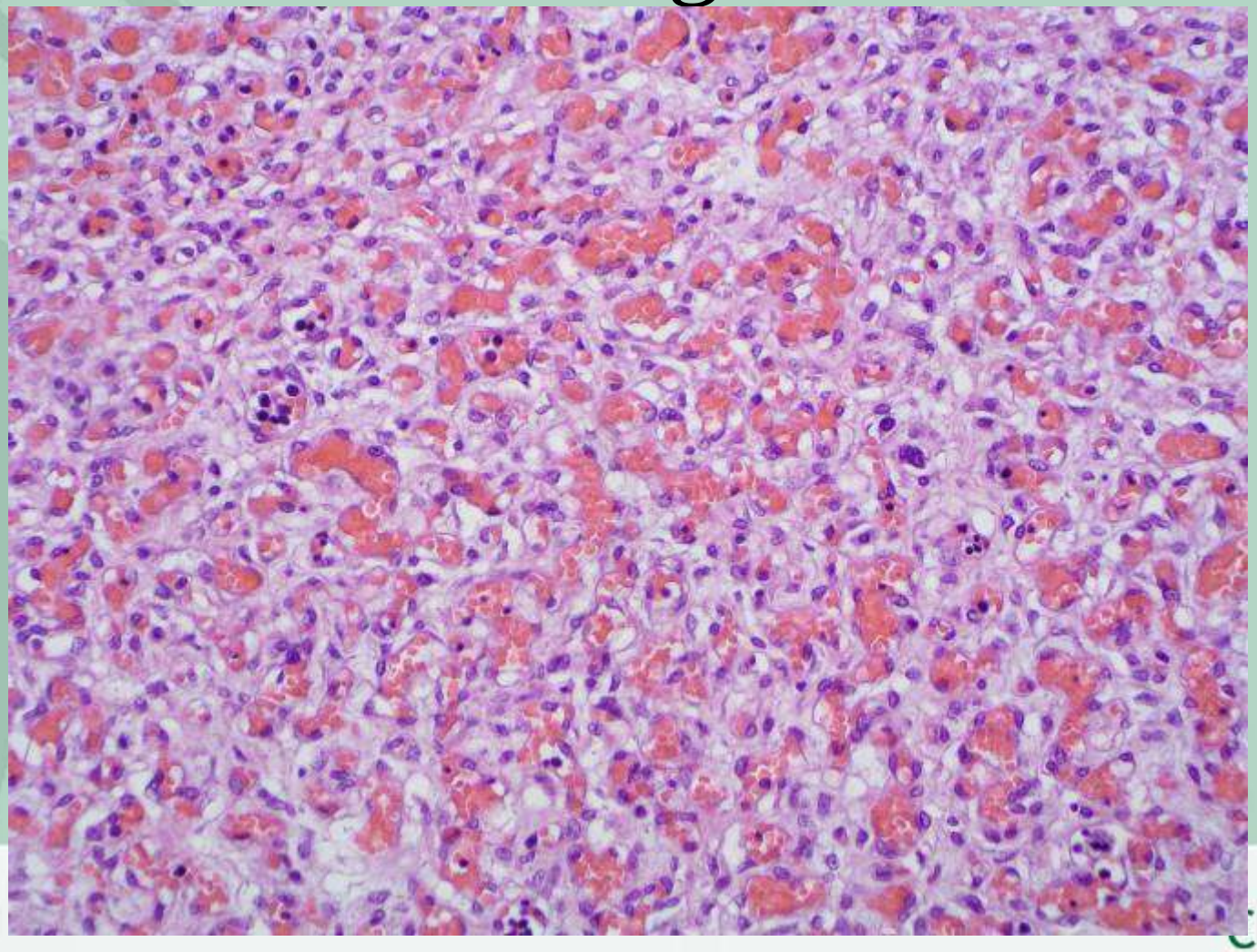
Corioangioma



Corioangioma



Corioangioma



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