

QFB RAMSES OSORIO RUIZ

**BACTERIAS EN ORINA Y CASOS
CLINICOS**

Falsos positivos

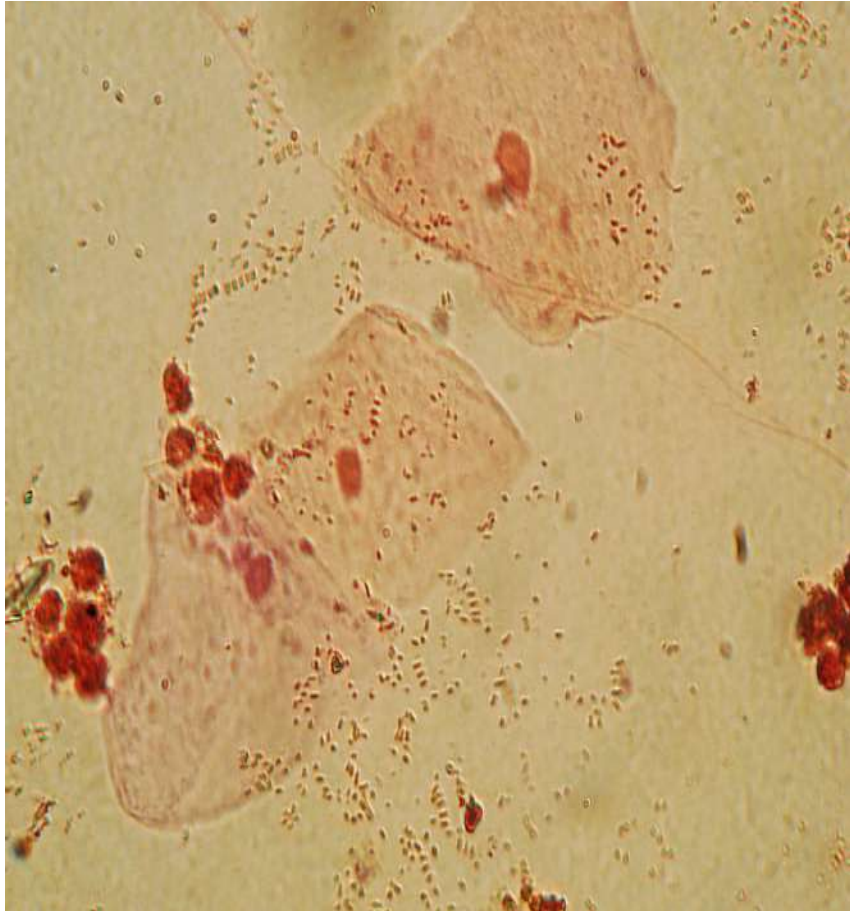
- Dieta
- Mal aseo (contaminación)
- Jabones (frasco estéril)
- Envase secundario
- Contaminación ambiental

Falsos negativos

- Diferentes tipos de bacterias
- Insuficientes nitritos
- Agotamiento de sustrato

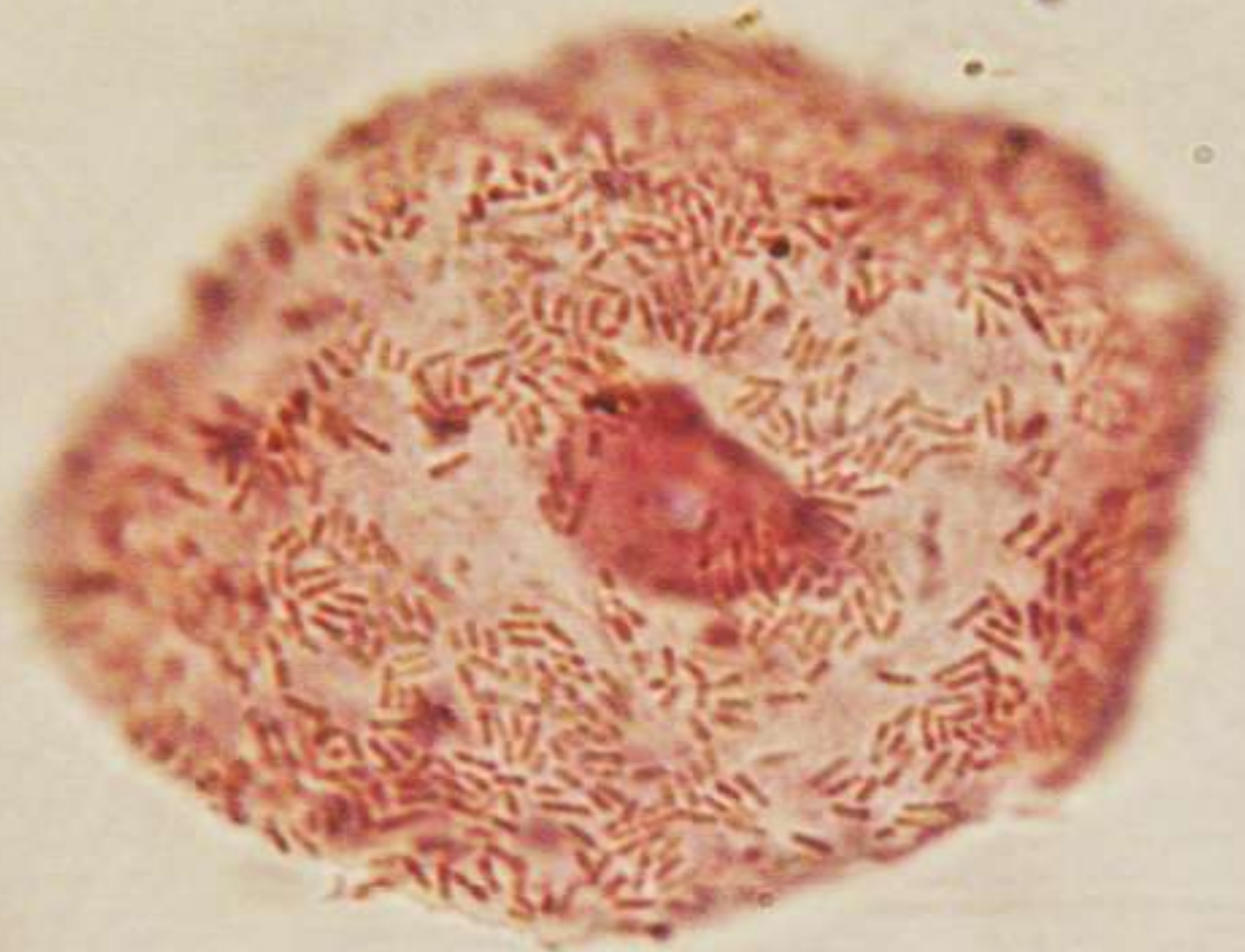


ADHERENCIA BACTERIANA

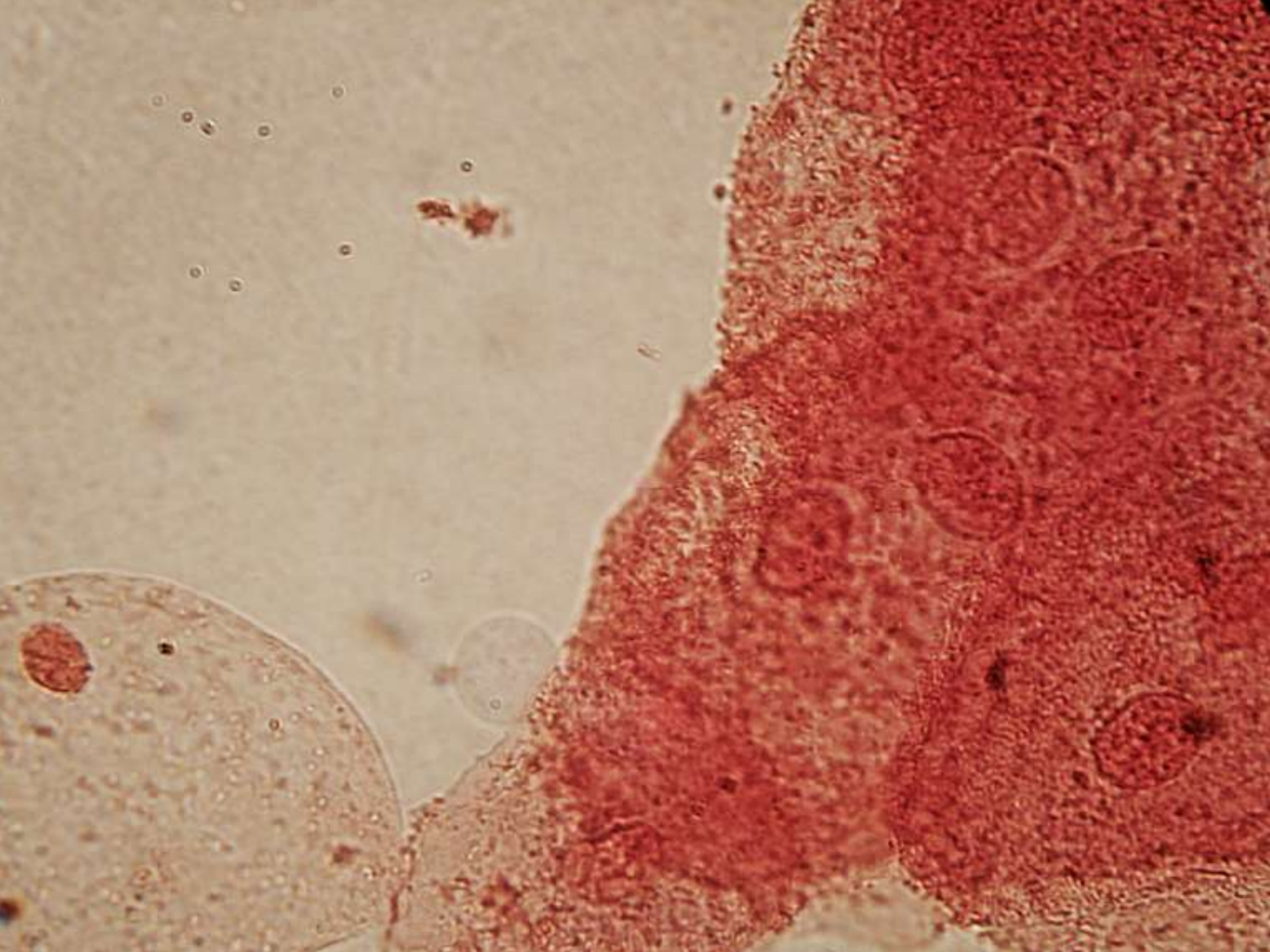


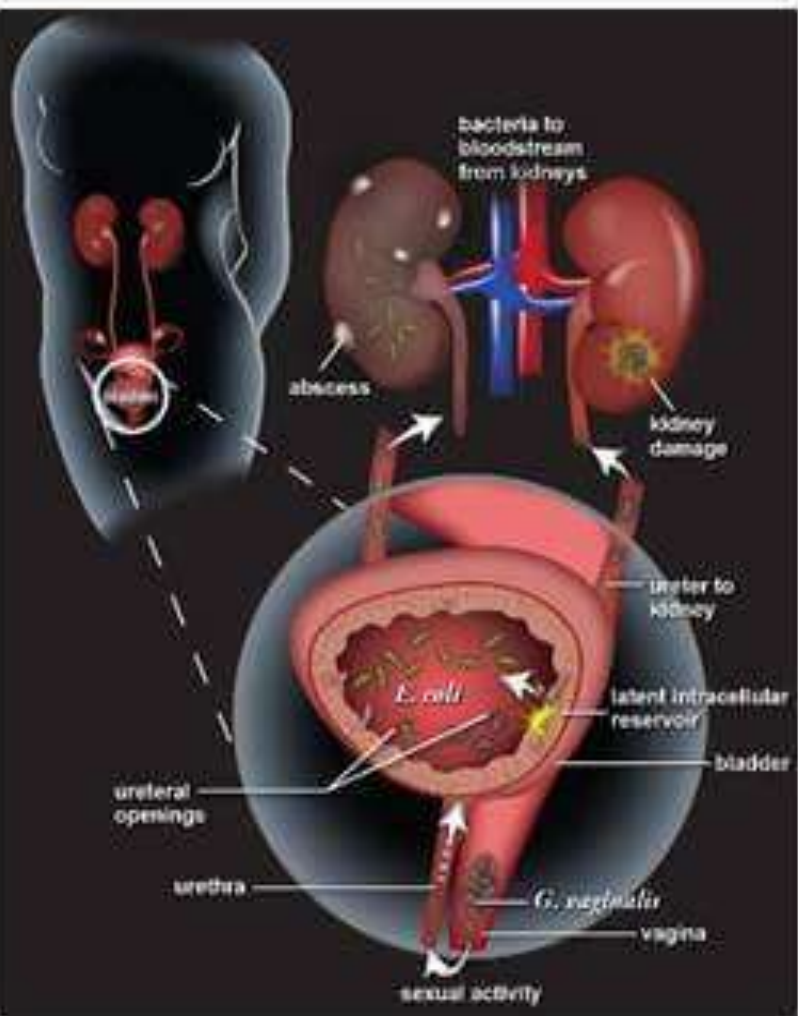




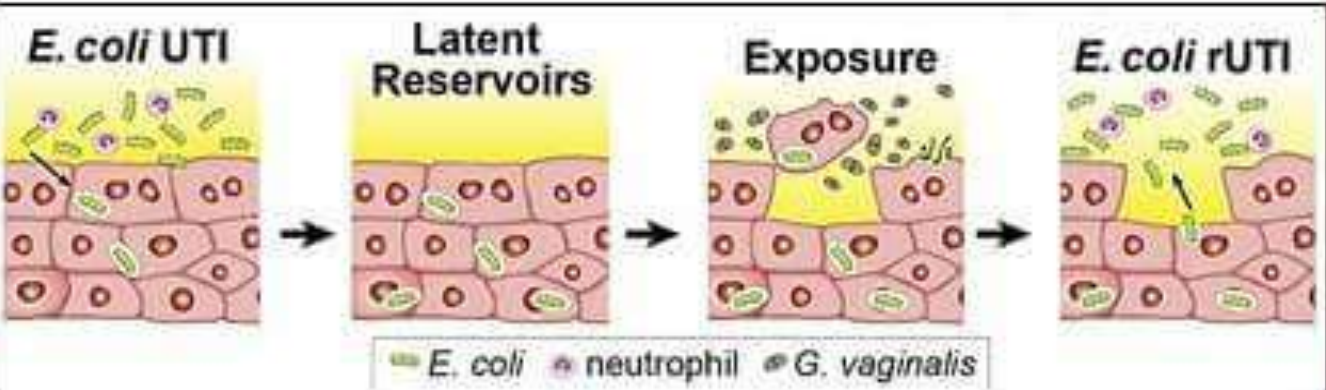
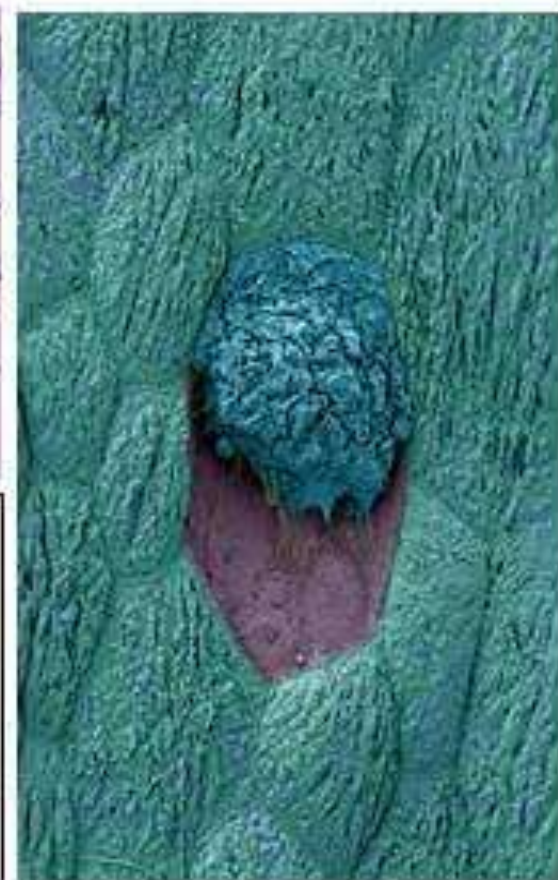
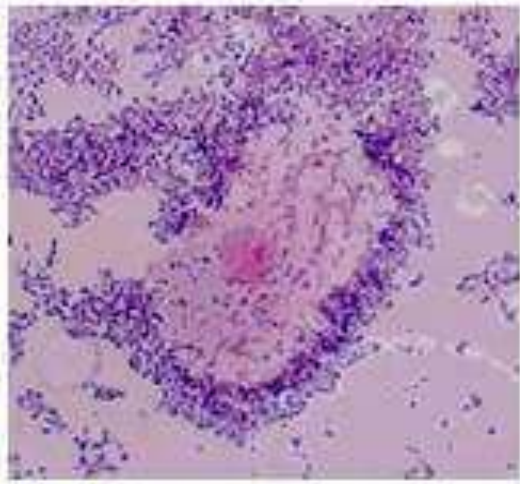
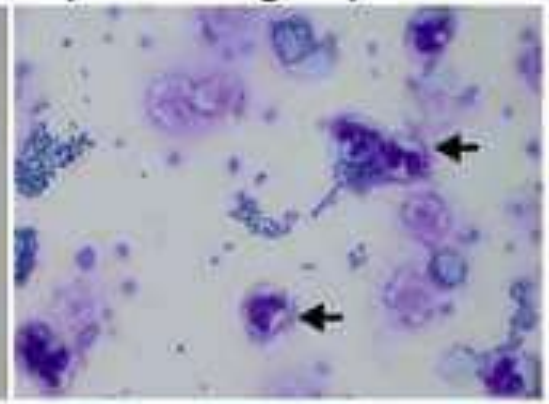


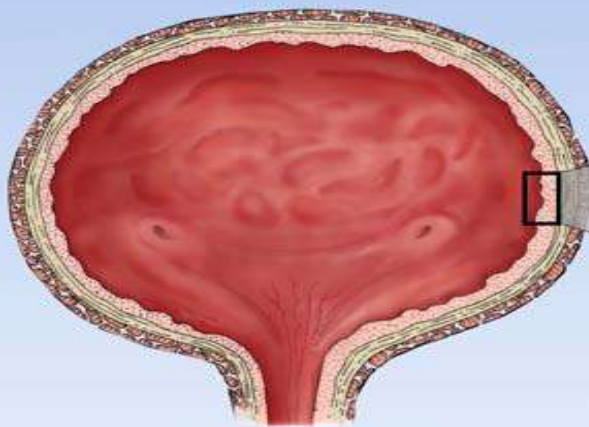




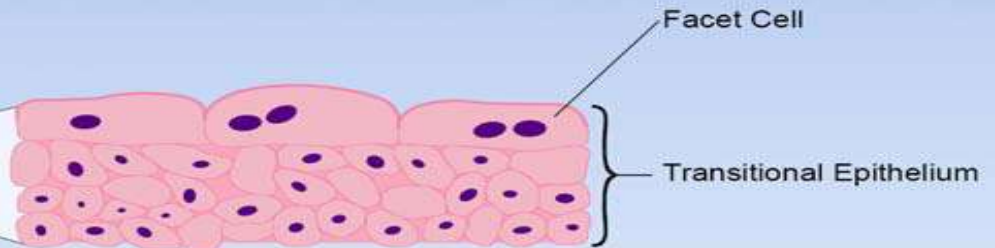


E. coli (-)Urine sediment post-PBS exposure *E. coli* (+)Urine sediment post-Gvag exposure

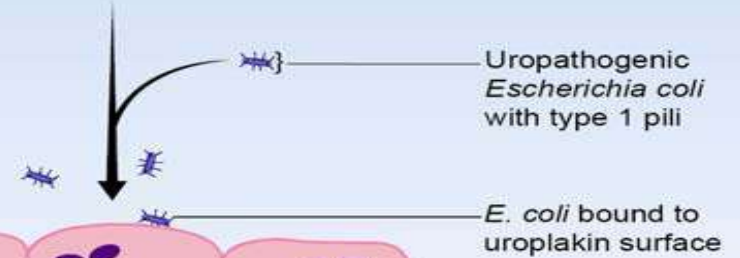




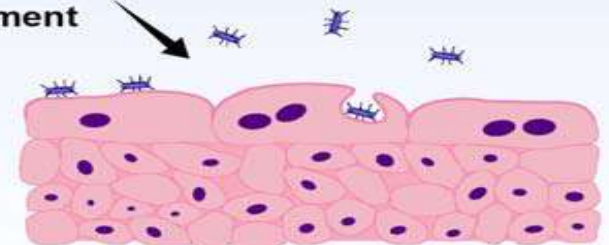
Urinary Bladder



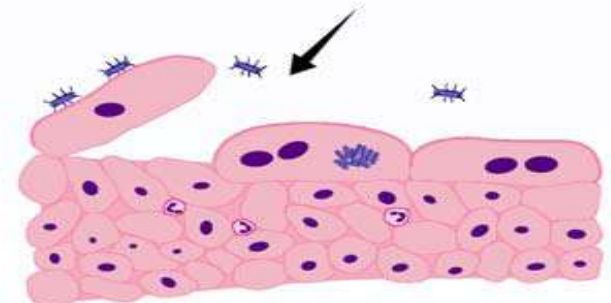
A. Normal Urothelium



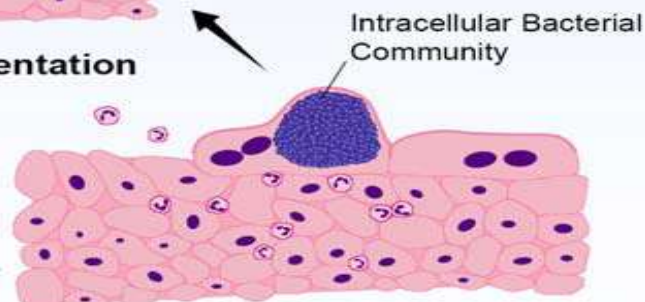
B. Attachment



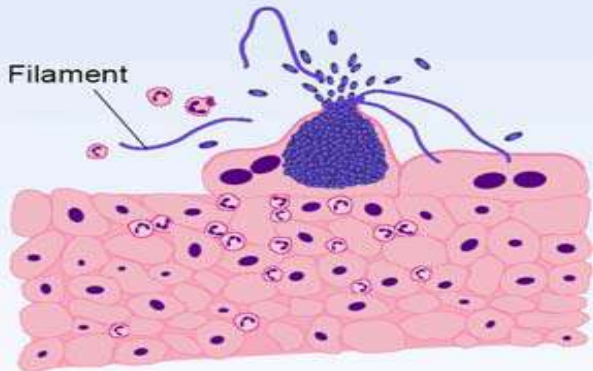
C. Invasion



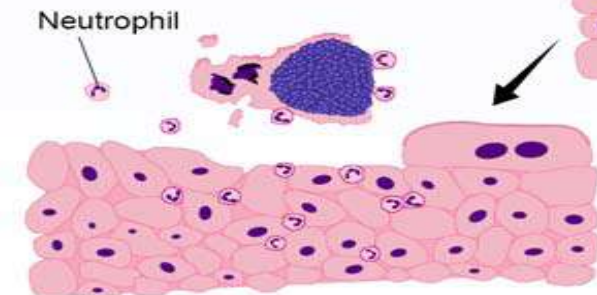
D. Intracellular Replication



E. IBC Formation



F. Exfoliation



Neutrophil

G. Fluxing and Filamentation

LUTS

Resolution of Symptoms

Empiric abx treatment
+/- urine cx

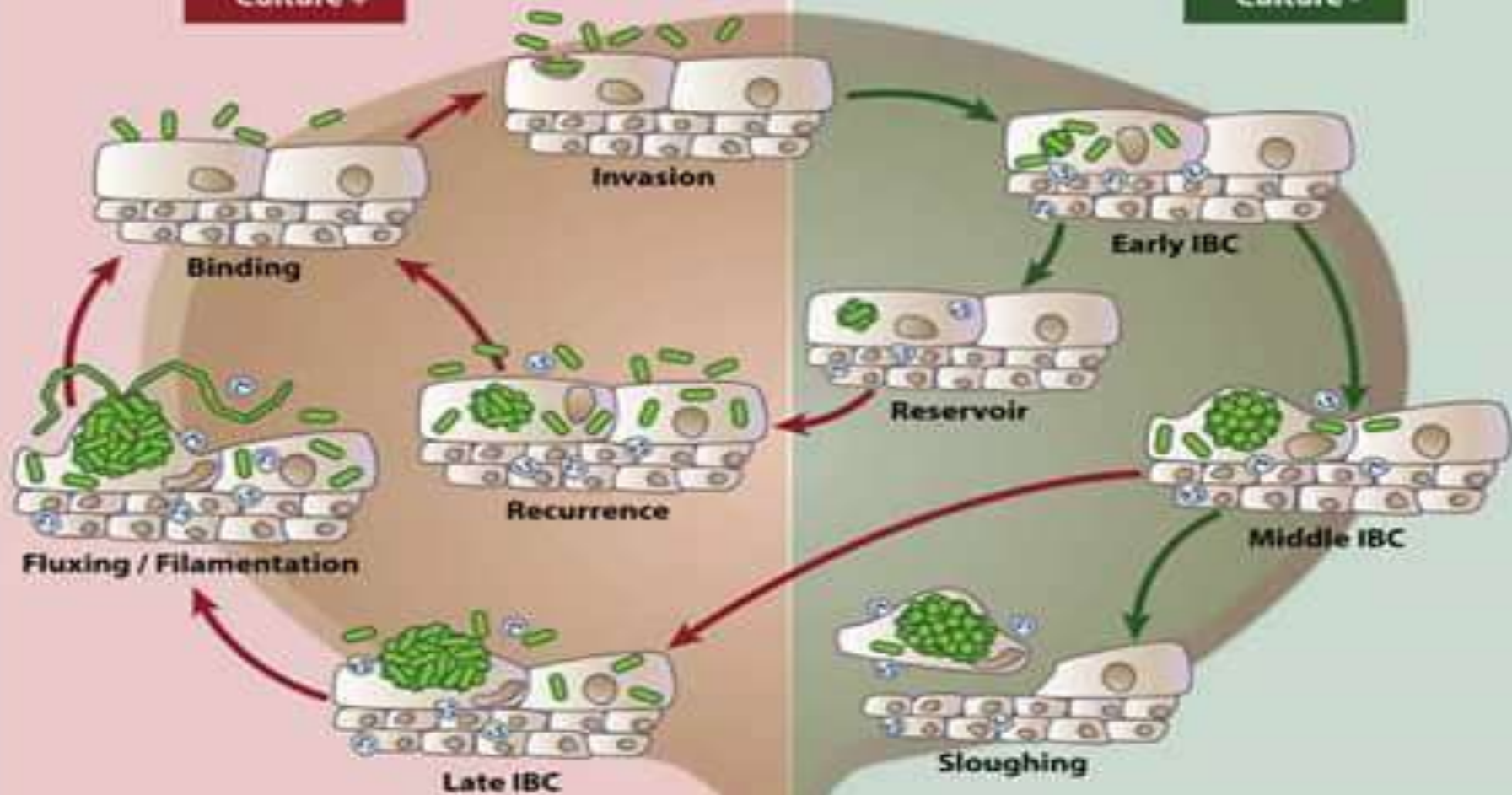
Recurrent/Persistent symptoms

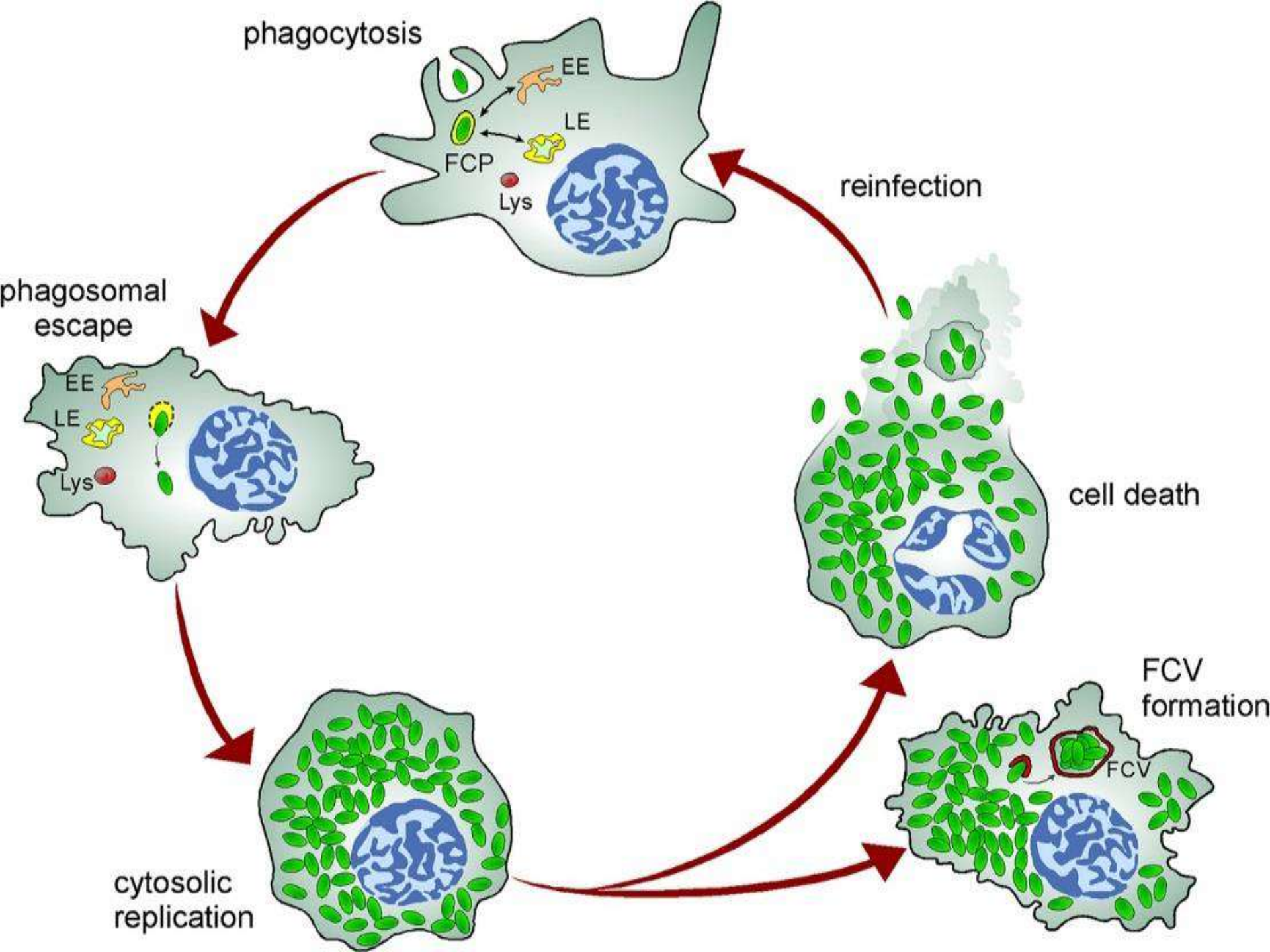
Rule out structural or
functional abnormality

R/o structural abnormality
+/- imaging and cysto
+/- urodynamics

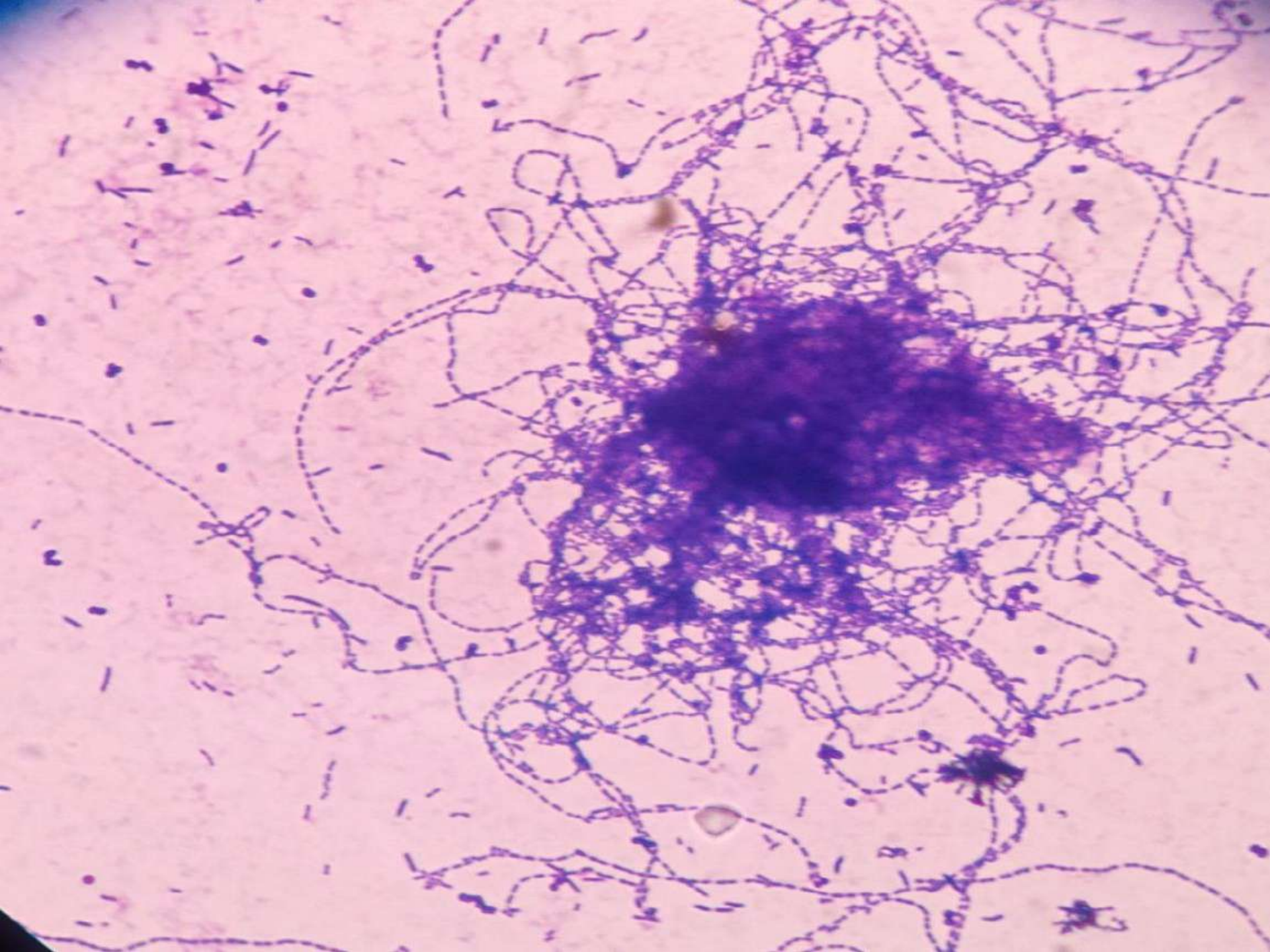
Culture +

Culture -

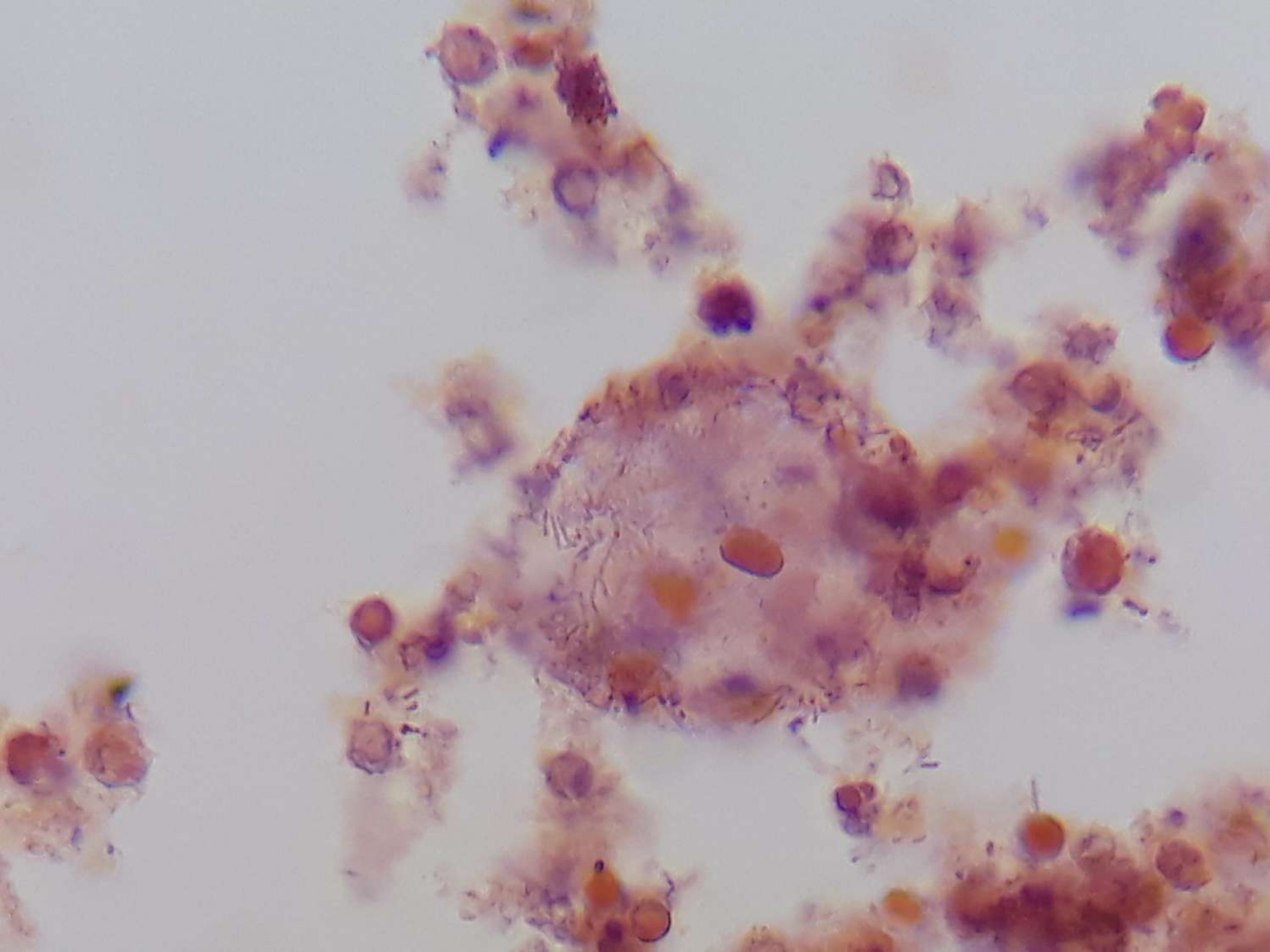


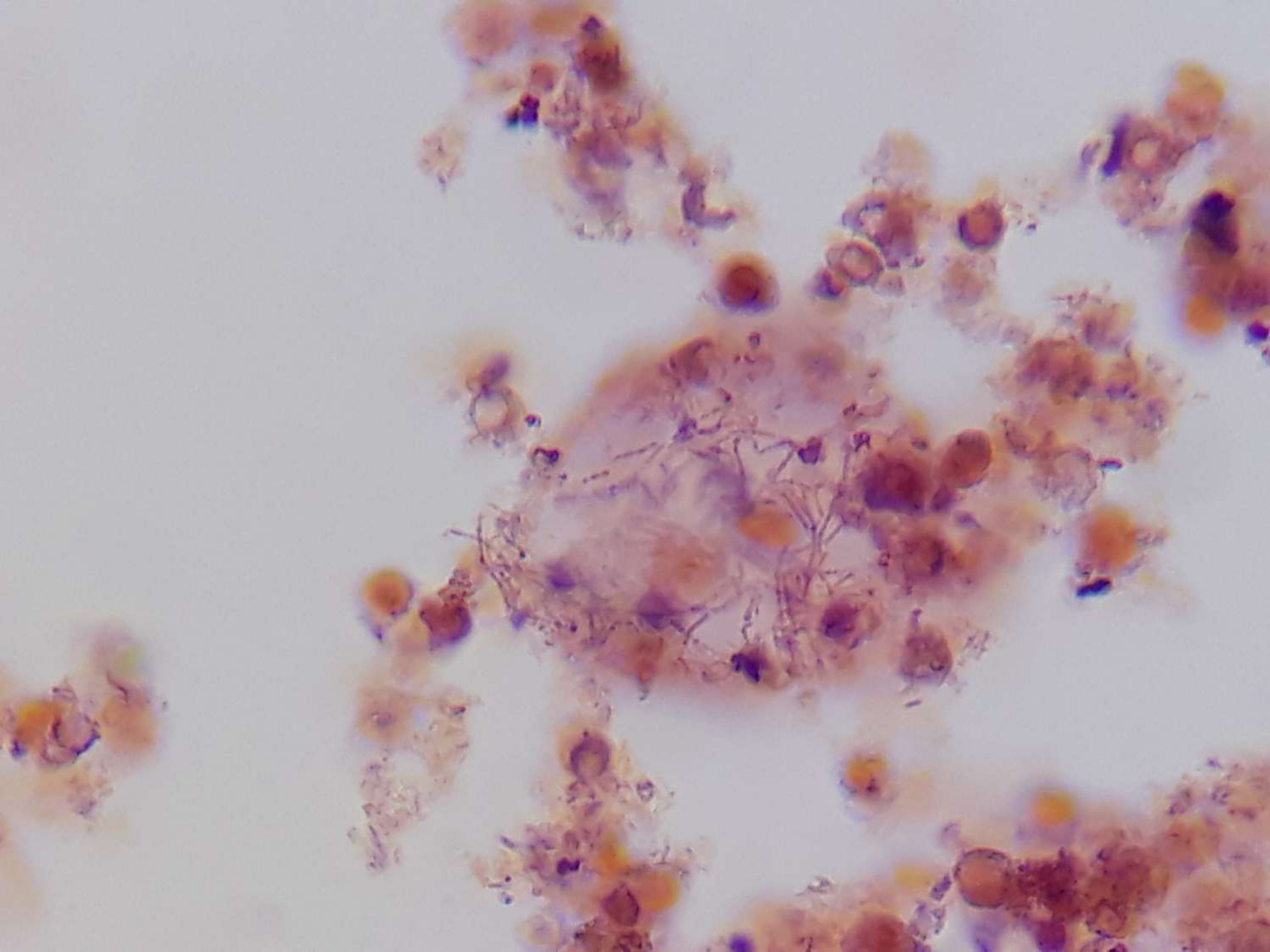


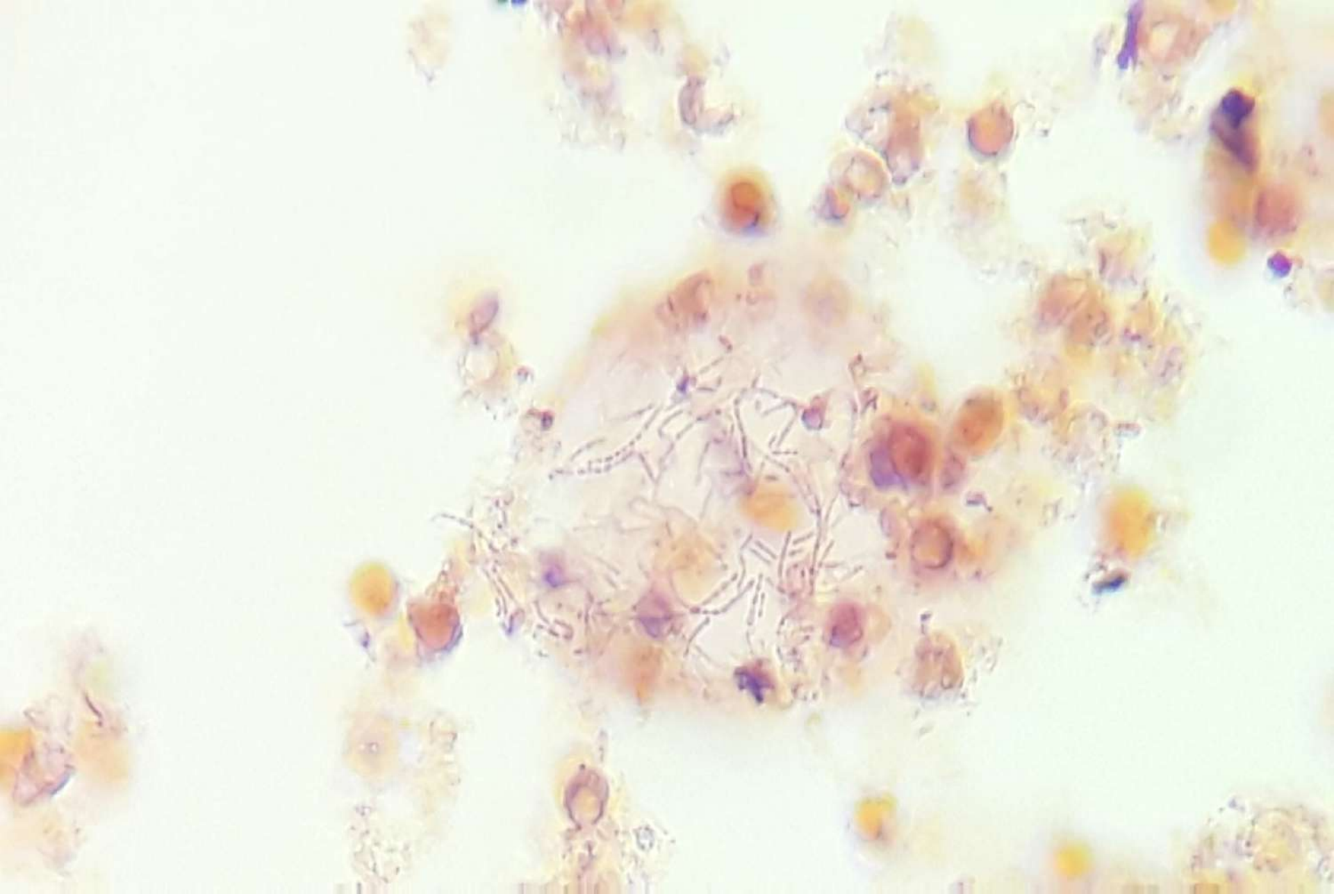
FILAMENTACION BACTERIANA













BIOFILM BACTERIANO

Attachment

1



Growth

2

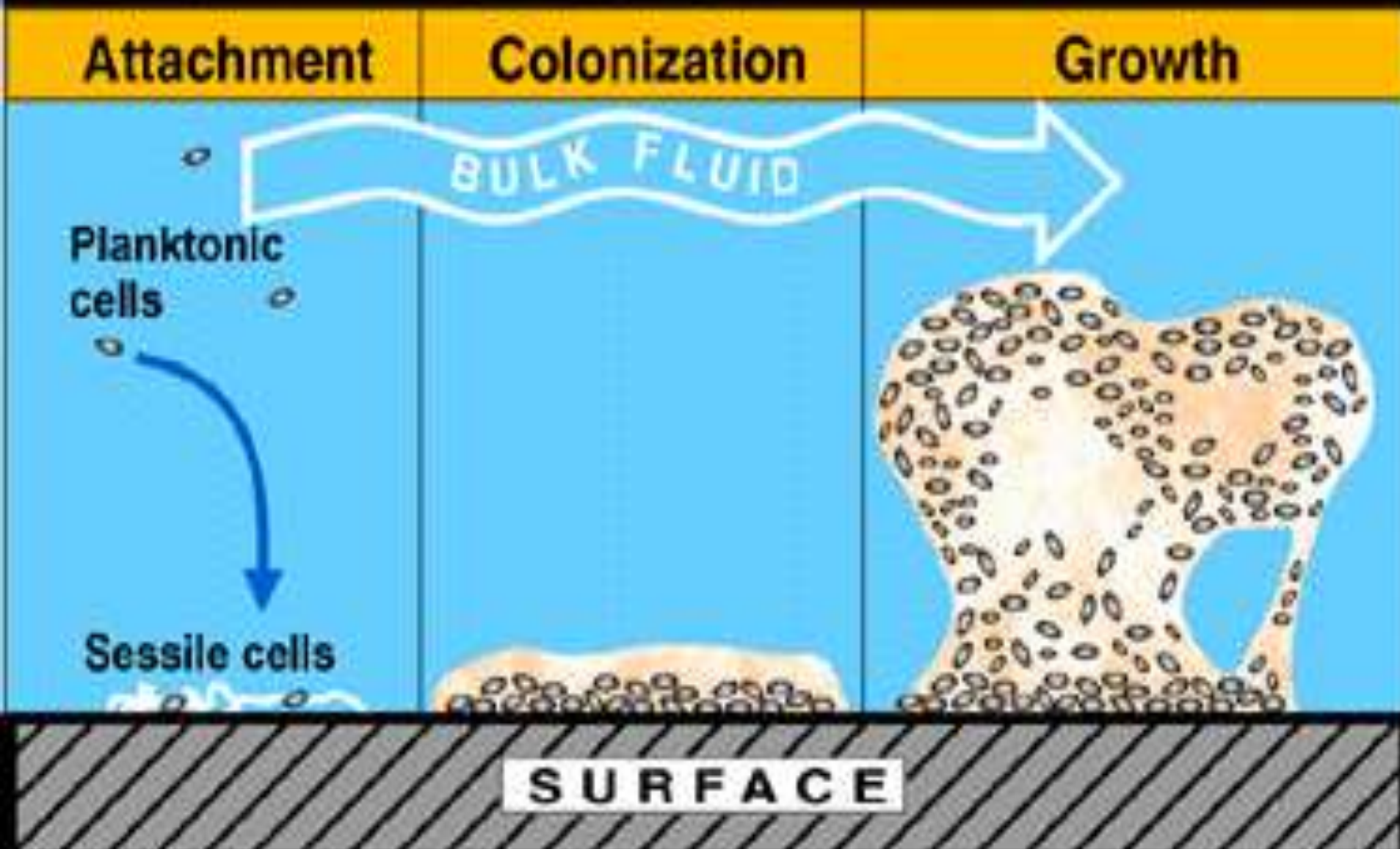


Detachment

3



Biofilm formation:



INVASIÓN

COLONIZACIÓN

FORMACIÓN

CRECIMIENTO

Células Planctónicas



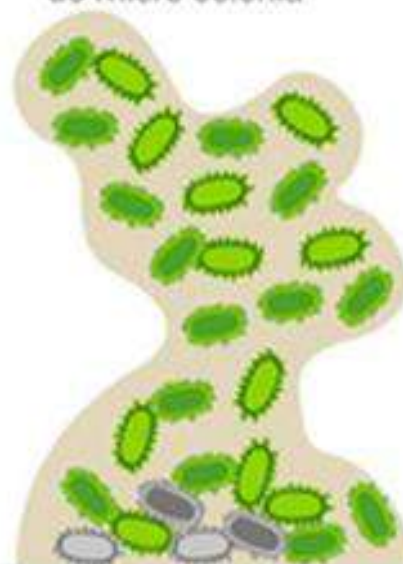
Primera Incrustación



Células Sésiles



Contacto célula a célula
más fuerte y formación
de micro colonia



Formación de un biofilm
maduro, con intersticios
con agua

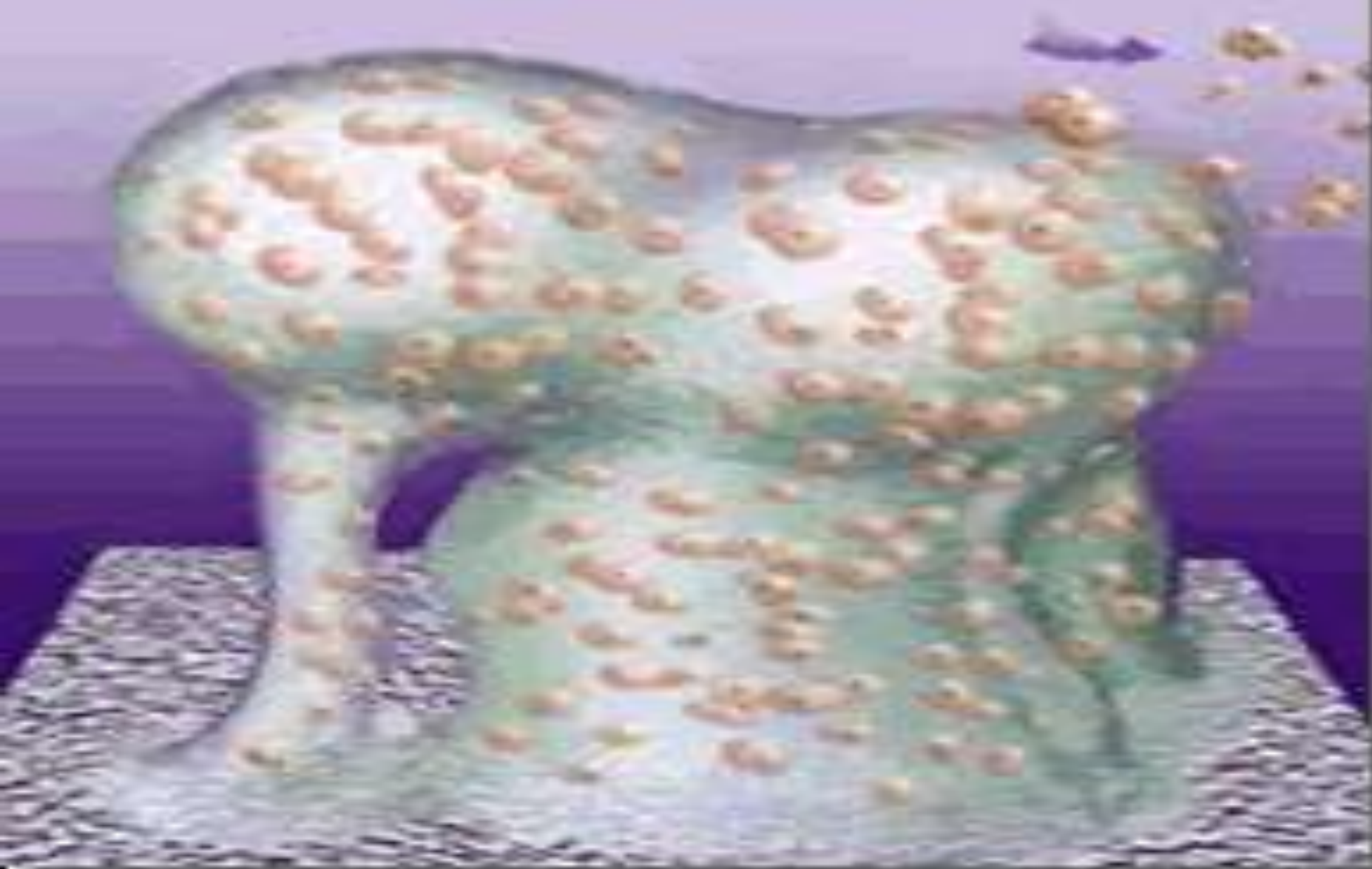


SUPERFICIE

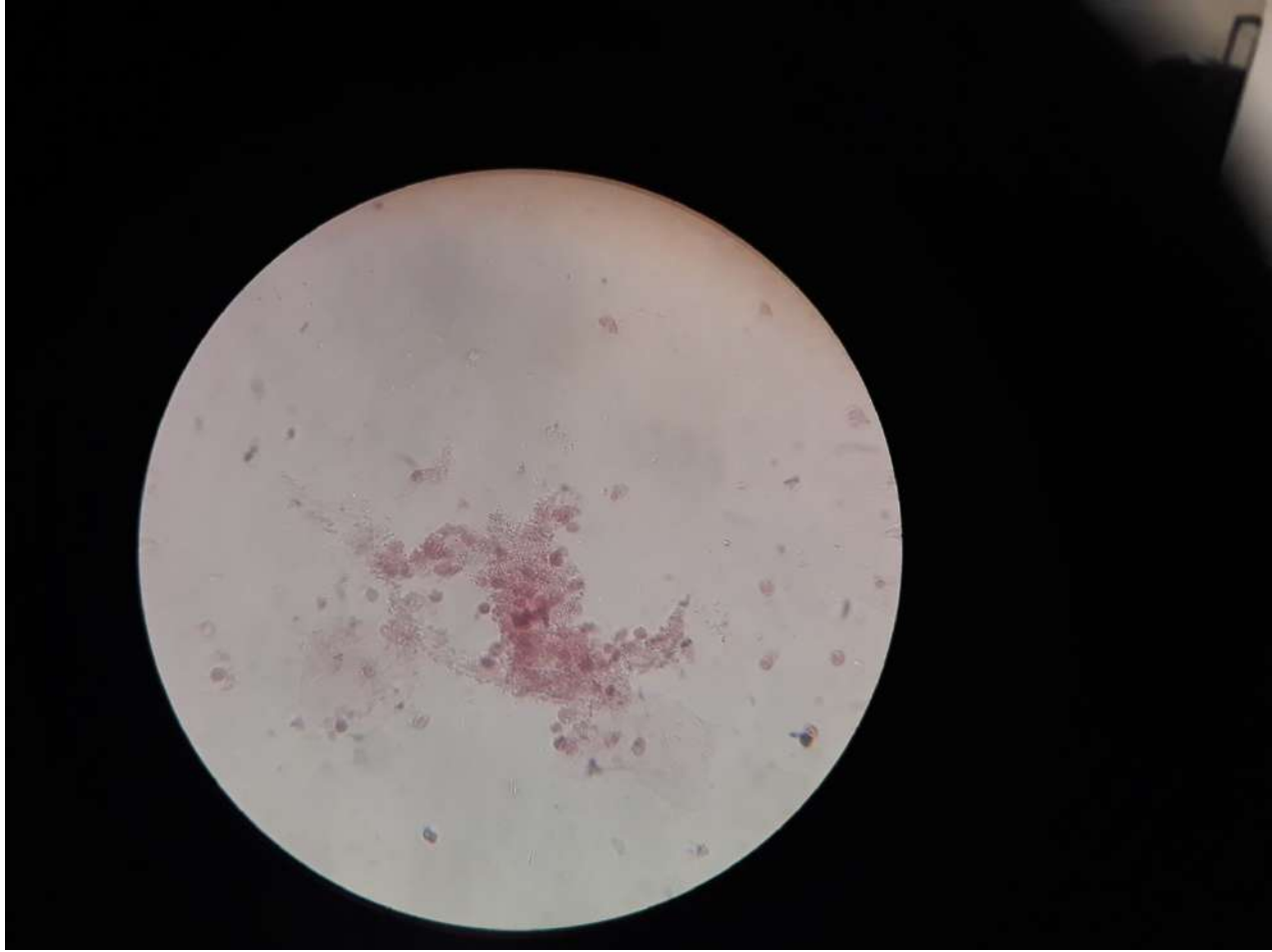
 Células Vivas  Células Muertas  Matriz

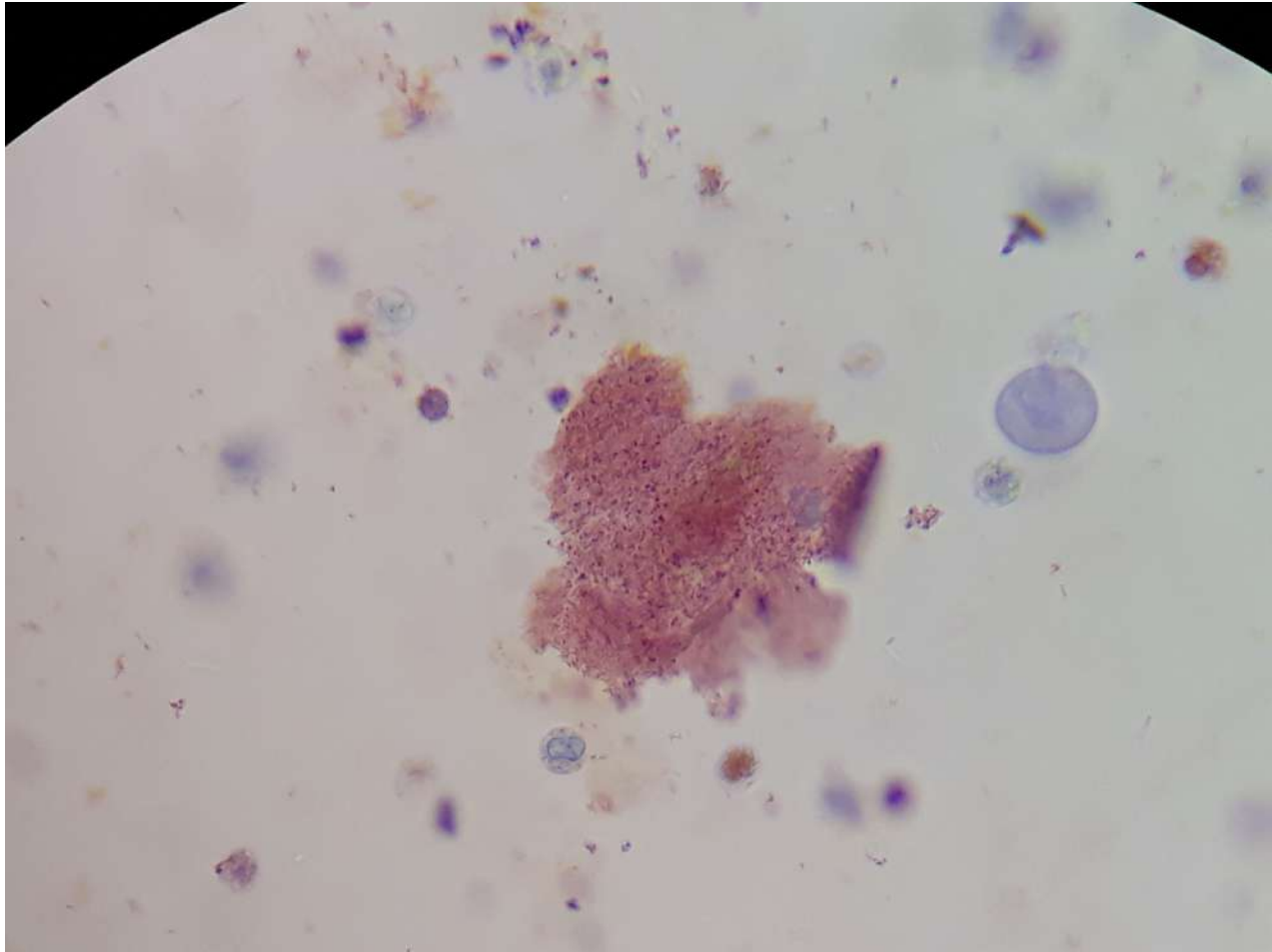
**bacterias liberadas
del BIOFILM**

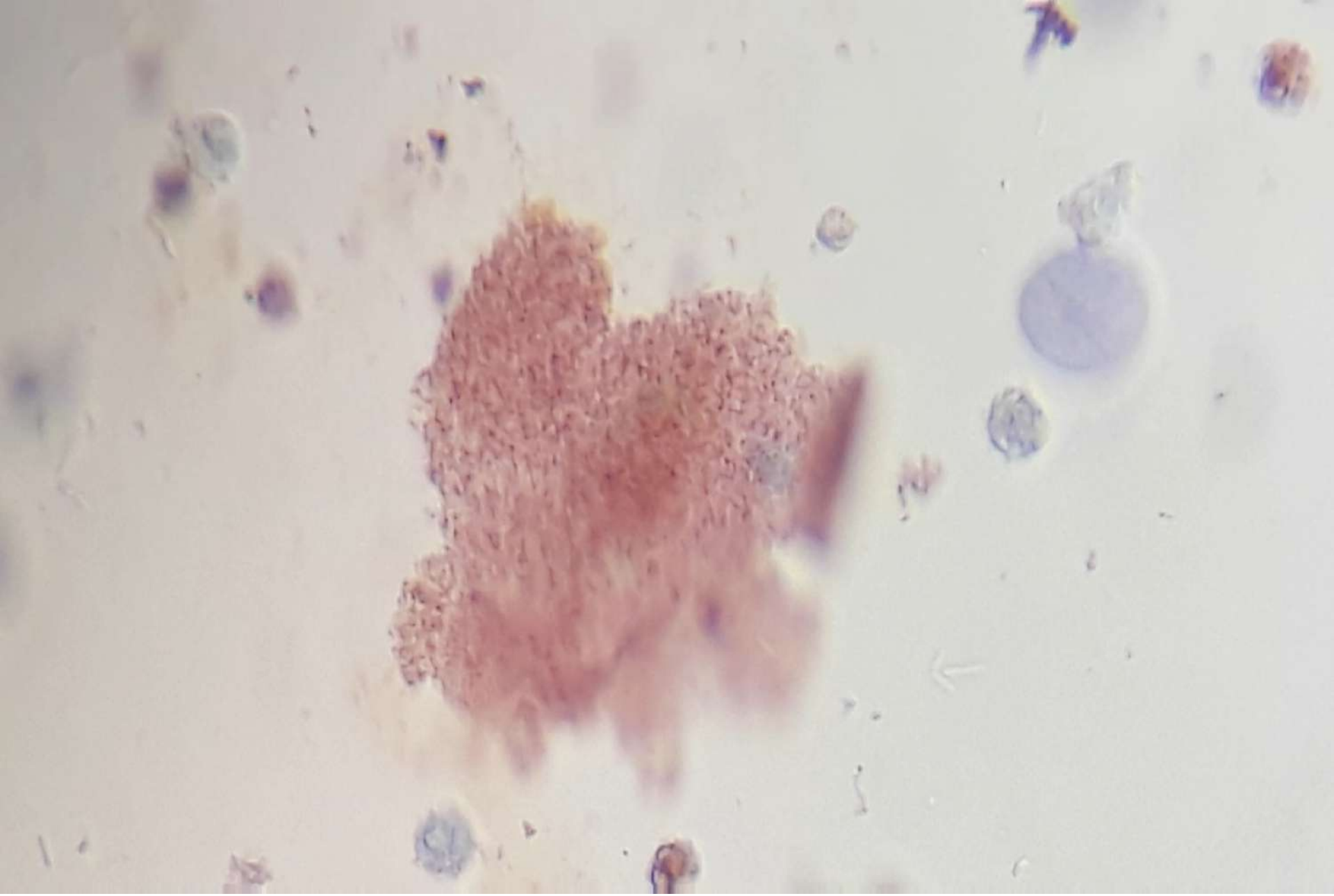
15











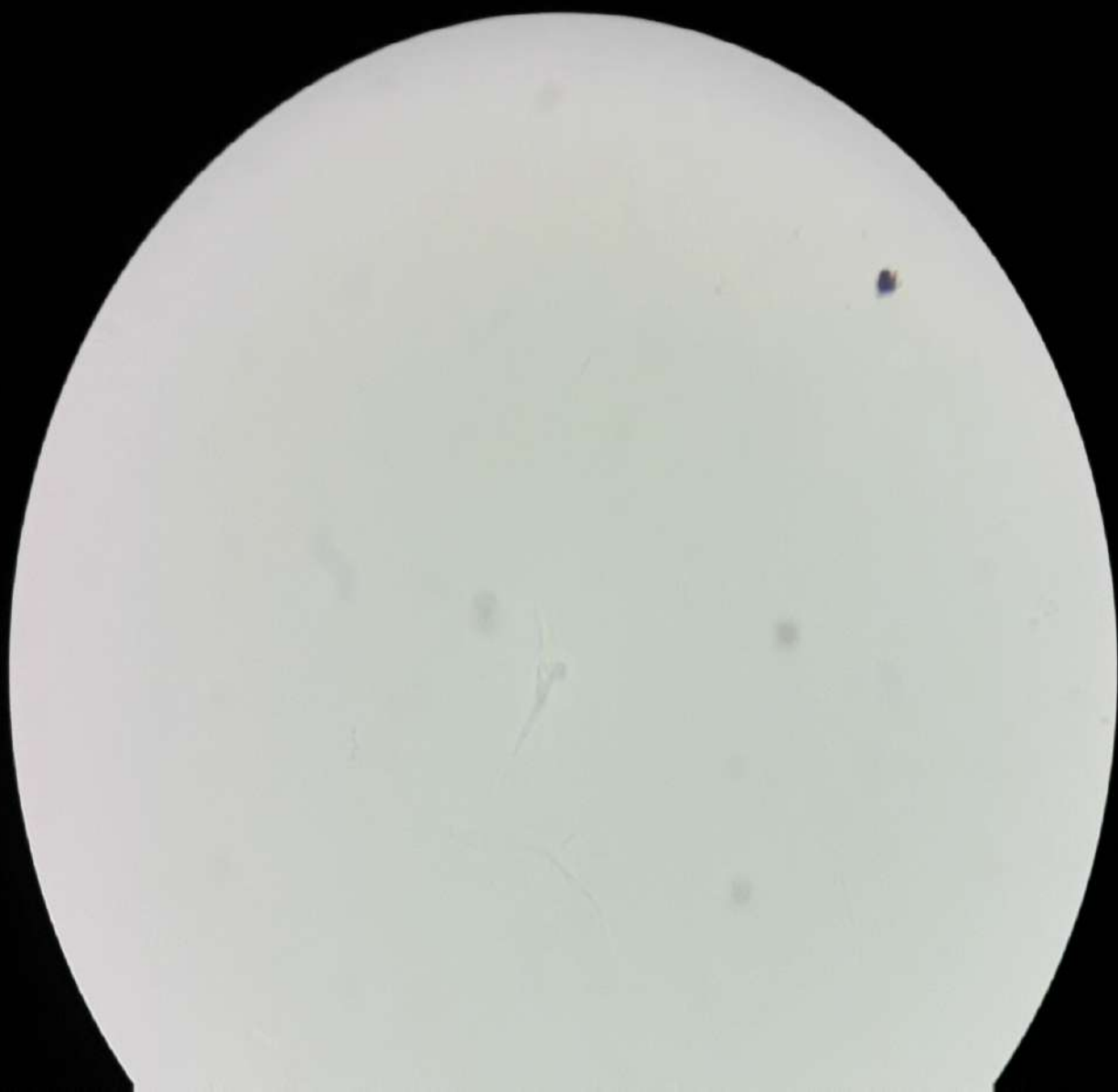
CASO CLÍNICO RN 5 MESES

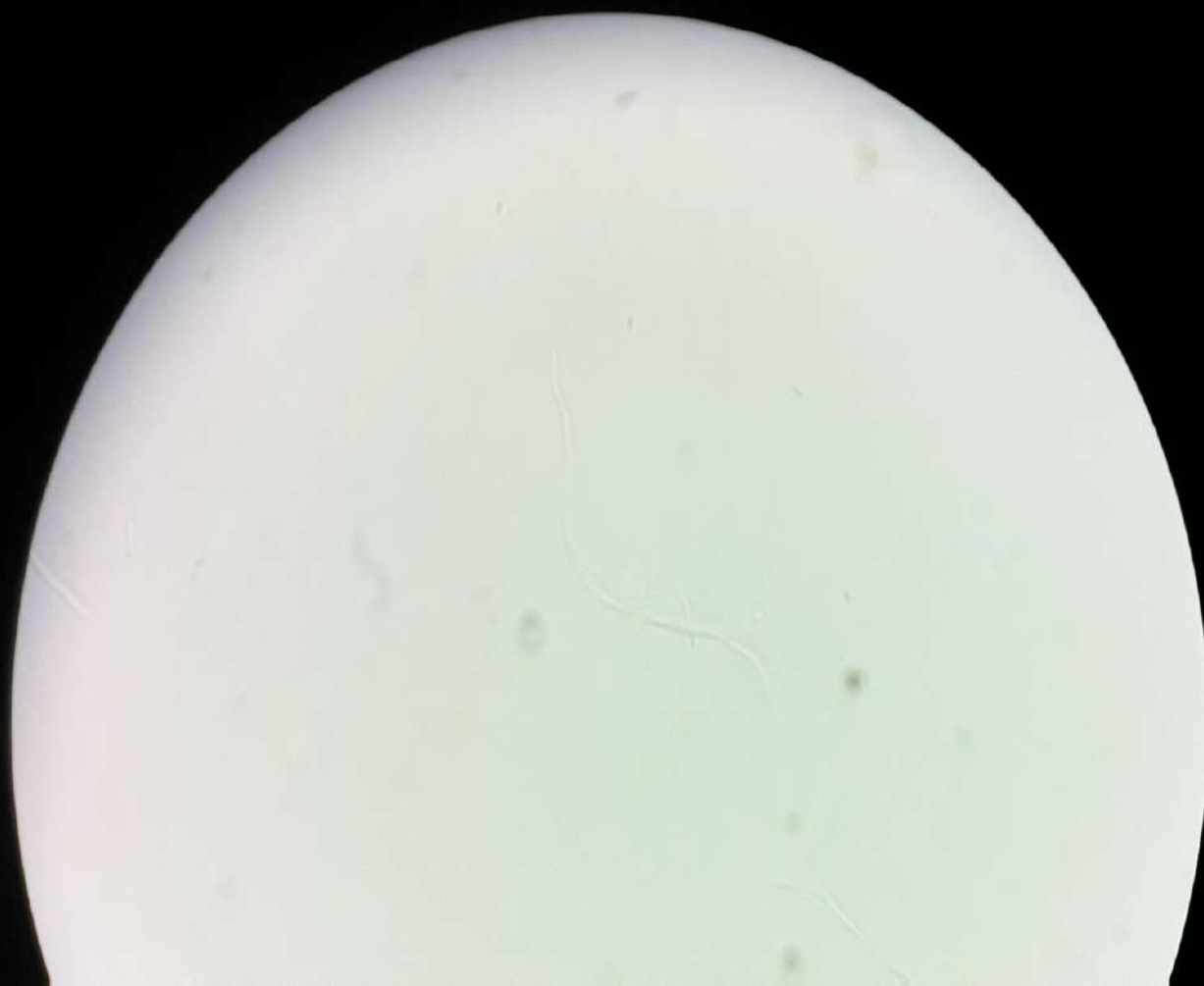
Estudio	Resultado	Unidad	Rango
GENERAL DE ORINA			
URIANALISIS			
Densidad	1.010		(1.005-1.030)
PH	7.0		5.50 - 7.00
Leucocitos	500	/μL	< = 10
Nitritos	POSITIVO		NEGATIVO
Proteinas	25	mg/dl	< = 10
Glucosa	<=30	mg/dL	< = 30
Cuerpos Cetonicos	NEGATIVO	mg/dL	< = 5
Urobilinogeno	<=1.0	mg/dL	< = 1.0
Bilirrubina	NEGATIVO	mg/dL	< = 0.2
Sangre	250	/μL	0 - 5
SEDIMENTO 400X O.CENT.7ML			
Leucocitos	8-10	POR CAMPO	NEGATIVO
Eritrocitos	4-6	POR CAMPO	NEGATIVO
C. Epiteliales	Escasas	POR CAMPO	NEGATIVO
Bacterias	⌘ Abundantes		
Cilindros	Negativo	POR CAMPO	
Cilindro	Negativo	POR CAMPO	
Moco	Escaso		
Cristales	Negativo		
Cristales	Negativo		
PIOCITOS	Negativo	POR CAMPO	
LEVADURAS	Negativo		







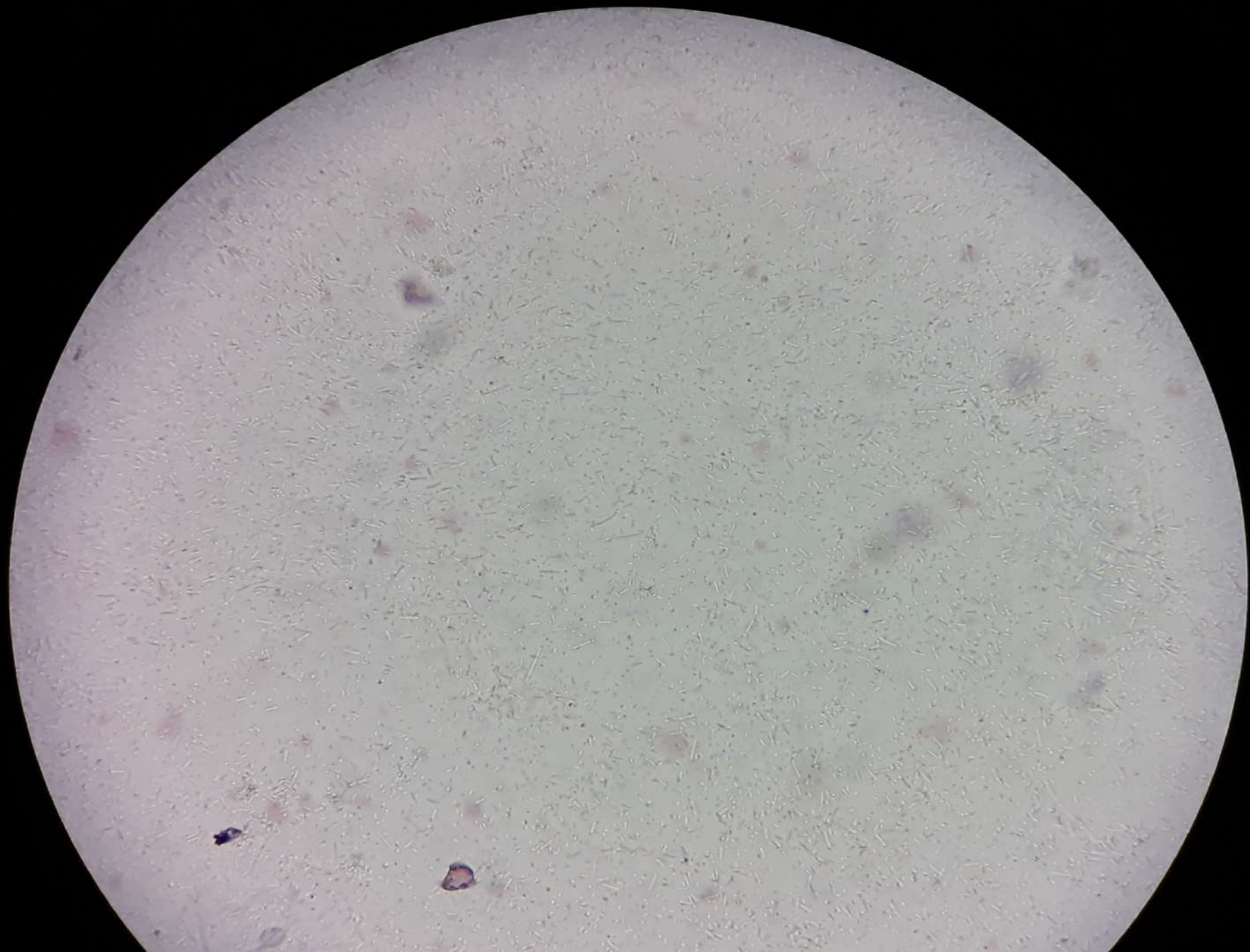


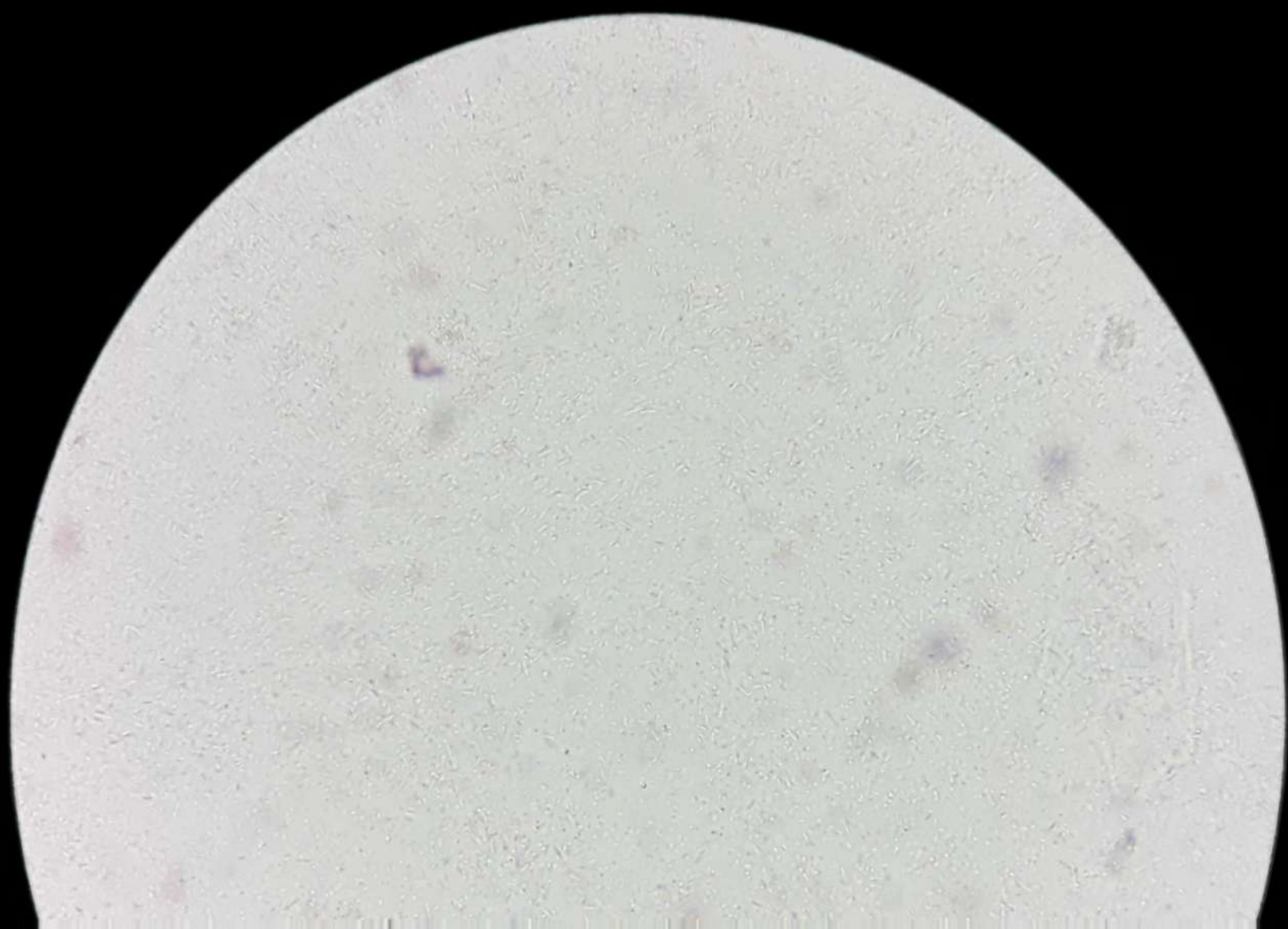


Caso clínico fem. 35 años

Estudio	Resultado	Unidad	Rango
GENERAL DE ORINA			
URIANALISIS			
Densidad	1.015		(1.005-1.030)
PH	6.0		5.50 - 7.00
Leucocitos	NEGATIVO	/μL	< = 10
Nitritos	NEGATIVO		NEGATIVO
Proteinas	NEGATIVO	mg/dl	< = 10
Glucosa	NORMAL	mg/dL	< = 30
Cuerpos Cetonicos	NEGATIVO	mg/dL	< = 5
Urobilinogeno	NORMAL	mg/dL	< = 1.0
Bilirrubina	NEGATIVO	mg/dL	< = 0.2
Sangre		/μL	0 - 5
SEDIMENTO 400X O.CENT.7ML			
Leucocitos	2-3	POR CAMPO	NEGATIVO
Eritrocitos	0	POR CAMPO	NEGATIVO
C. Epiteliales	Negativo	POR CAMPO	NEGATIVO
Bacterias	Abundantes		
Cilindros	Negativo	POR CAMPO	
Cilindro	Negativo	POR CAMPO	
Moco	Negativo		
Cristales	Negativo		
Cristales			
PIOCITOS	Escasos	POR CAMPO	
LEVADURAS	Negativo		
OBSERVACIONES:			
OBSERVACIONES:			
.			
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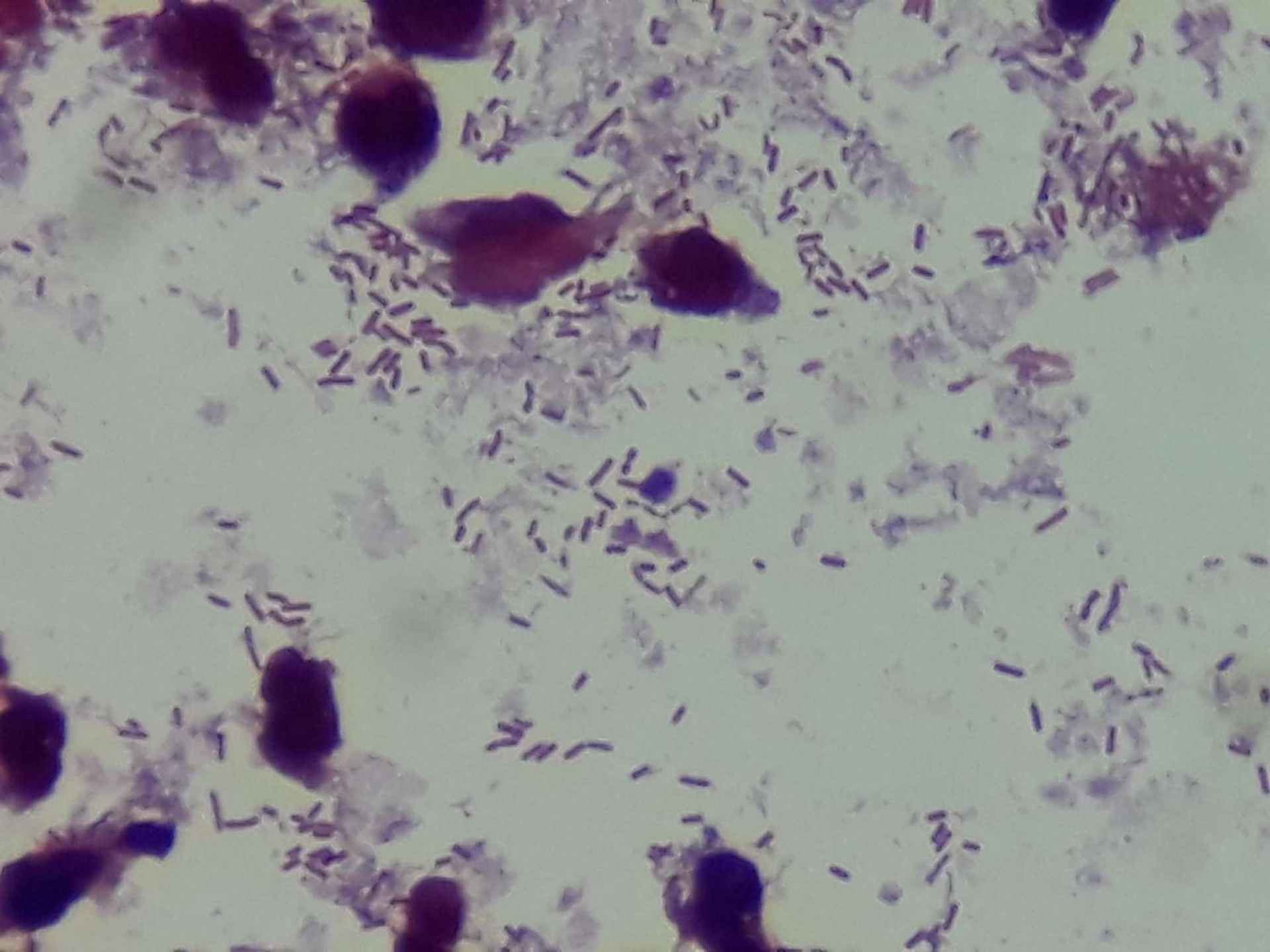


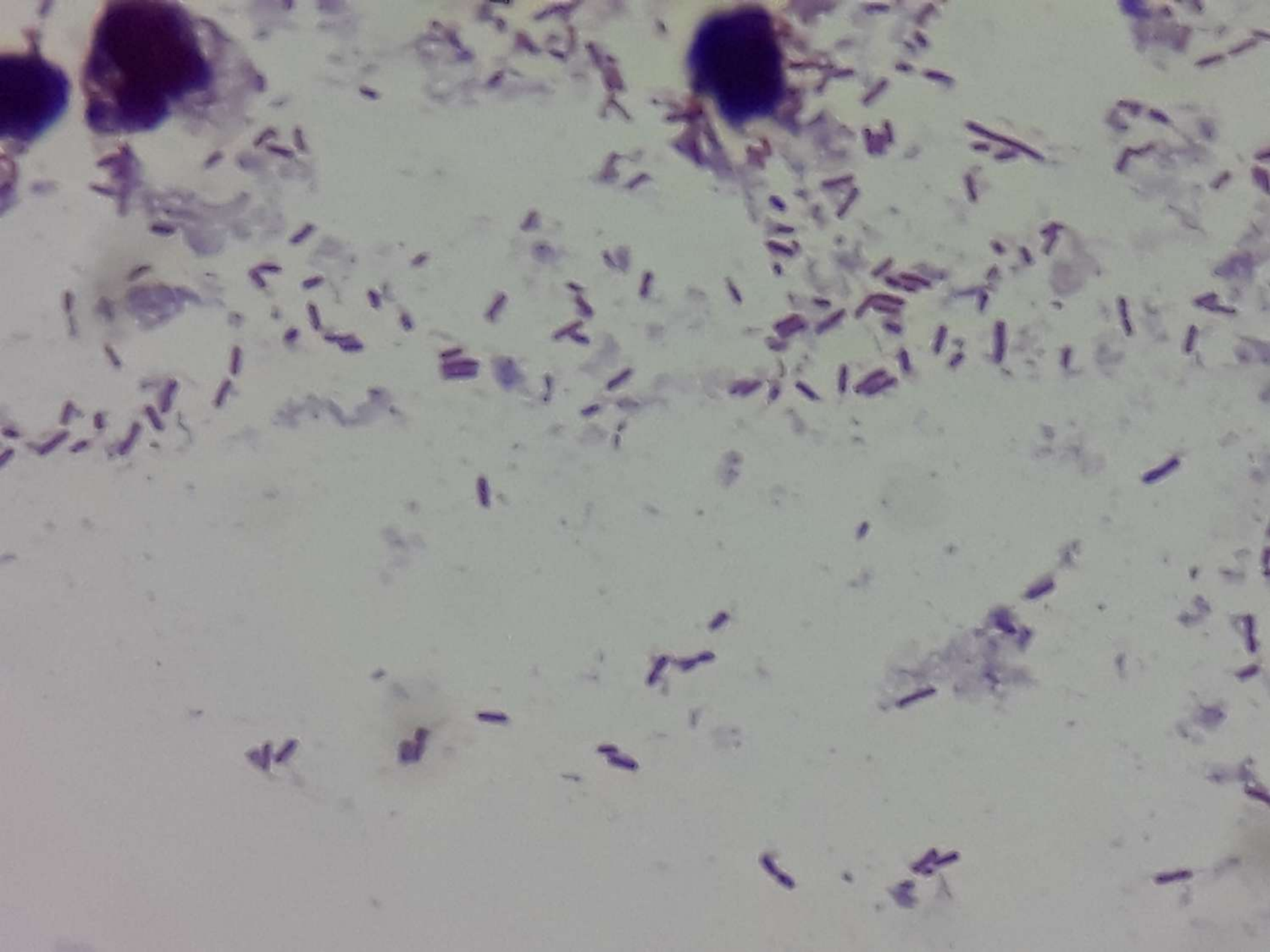
**Gram positive
bacteria**

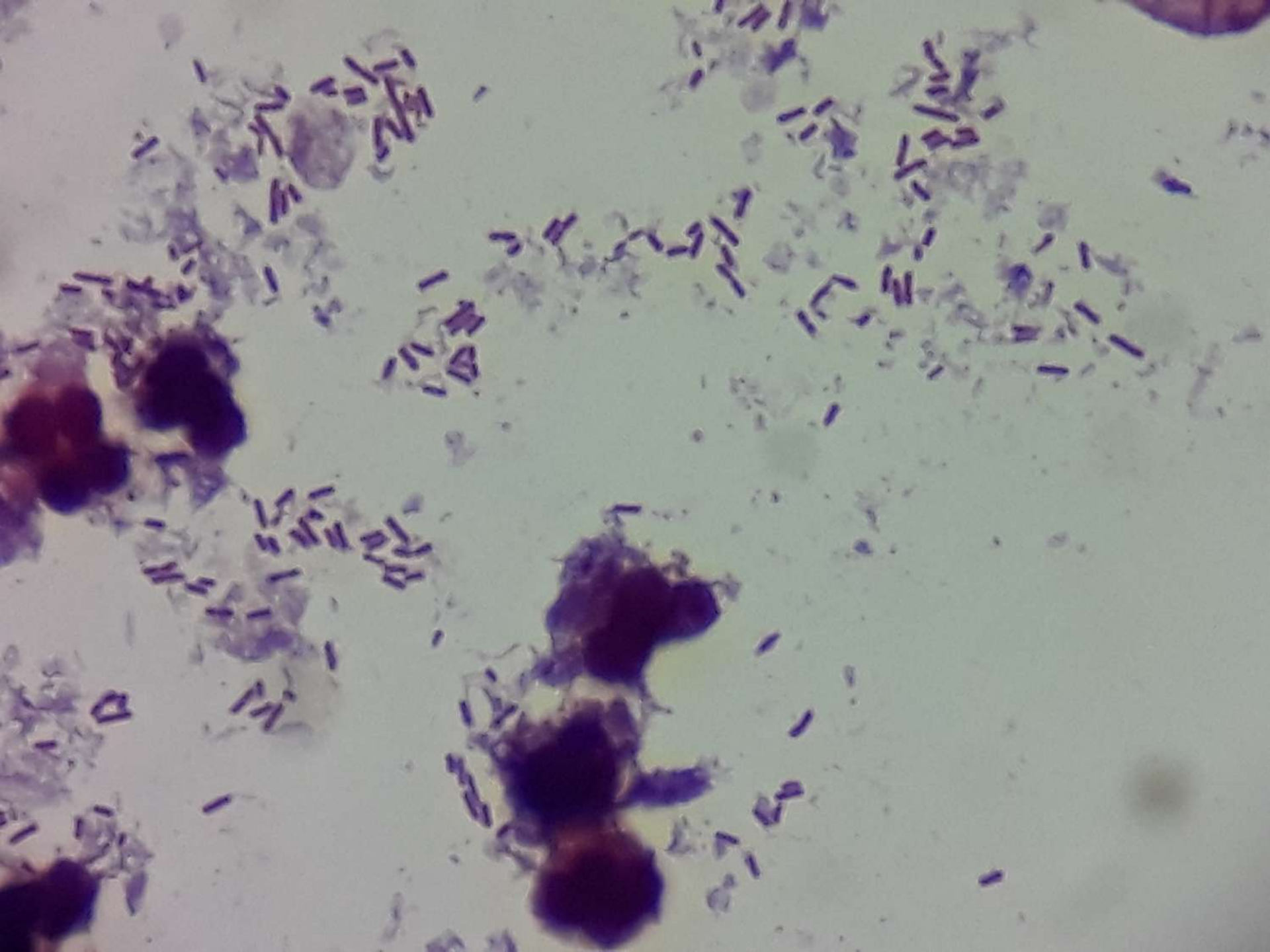
**Gram negative
bacteria**

MacConkey Agar

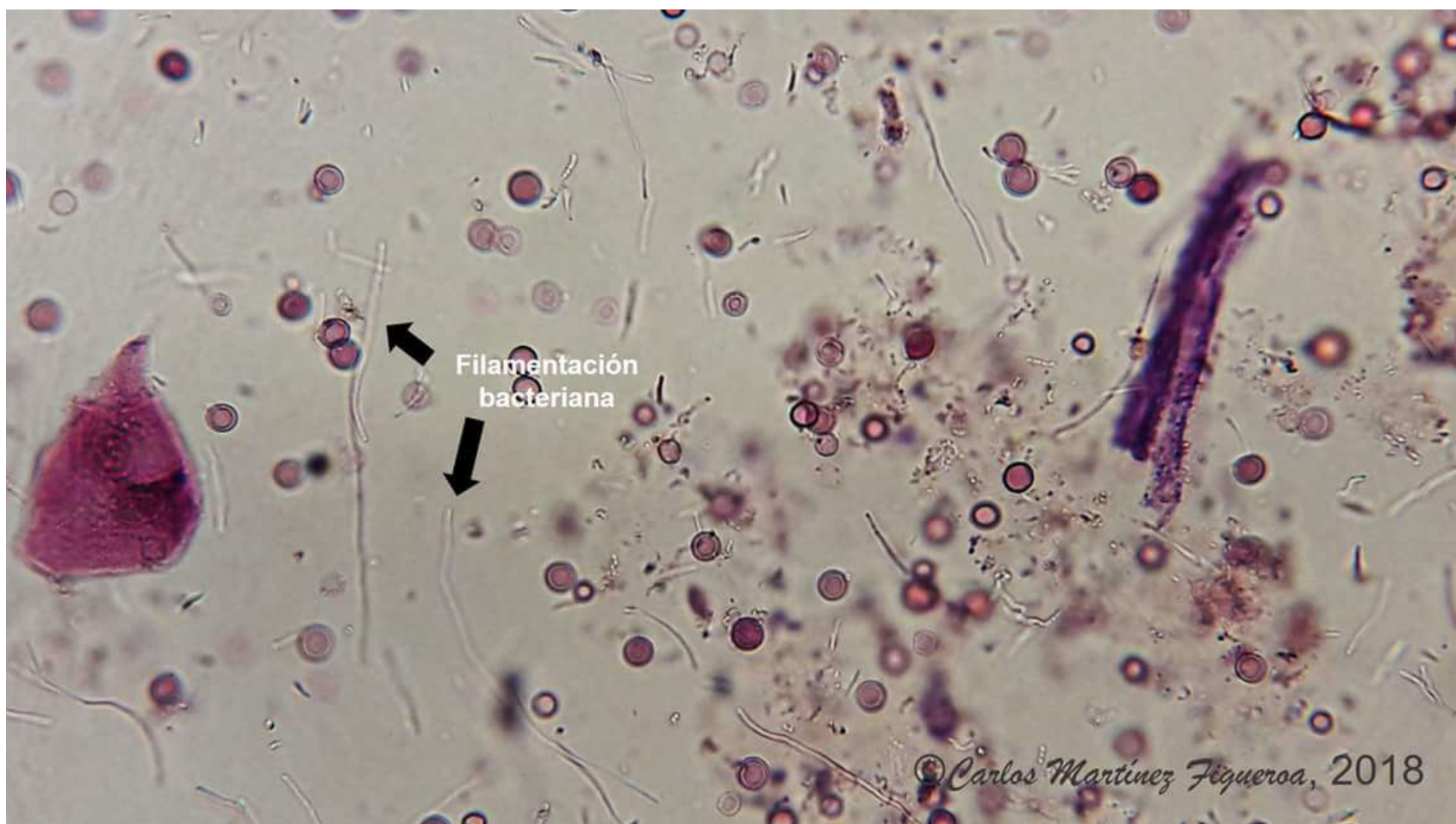


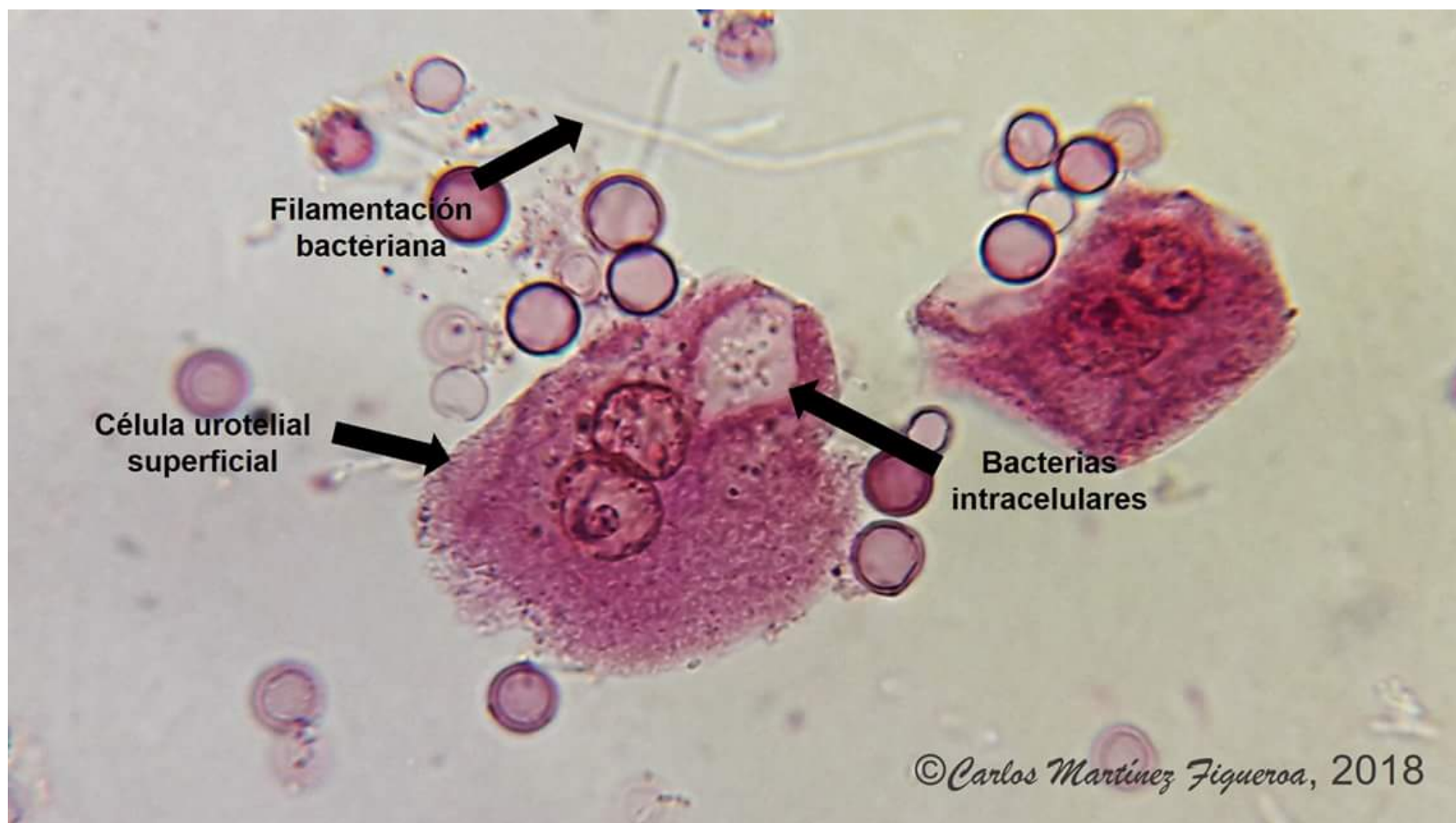


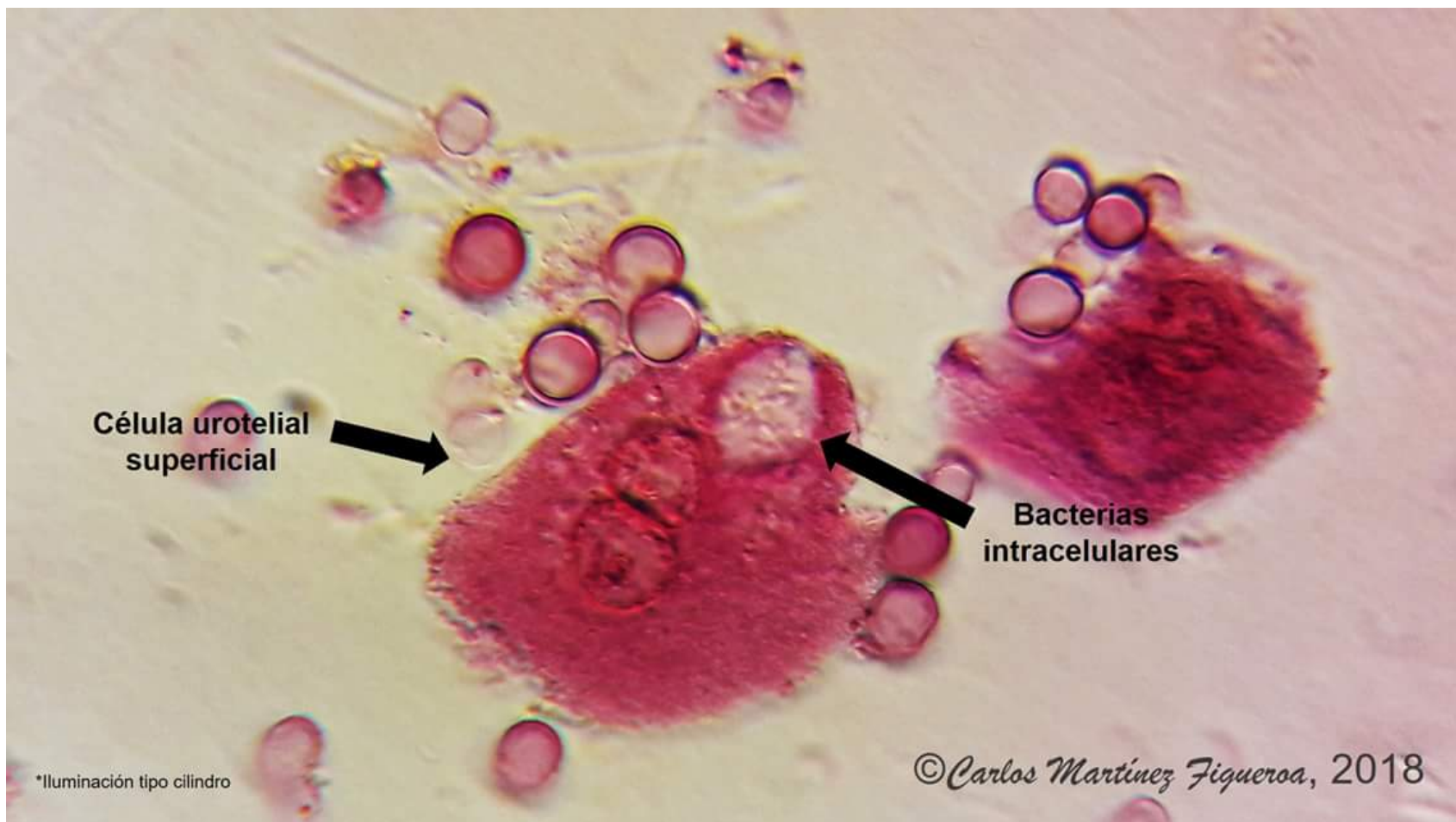




CASO CLÍNICO (CIB)







DESEGO[®]

Le pedimos que escanee el siguiente código
con la cámara de su celular:



<https://es.surveymonkey.com/r/GH6VQCV>