



Autonomous University of San Luis Potosí  
Faculty of Chemical Sciences  
General Microbiology Laboratory



# *Proteus mirabilis*

Student: Amaro Medina Ernesto

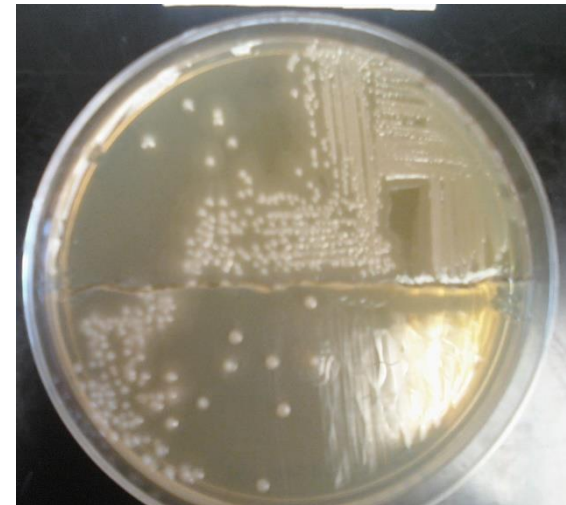
Teacher: QFB. Juana Tovar Oviedo

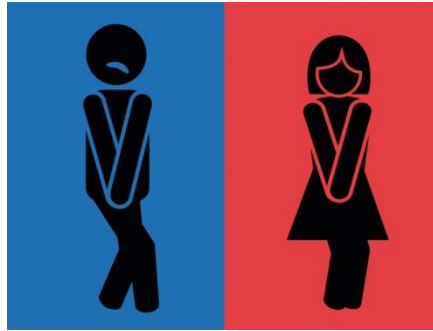
Group: 11:00-12:00

Tuesday, March 21st, 2017

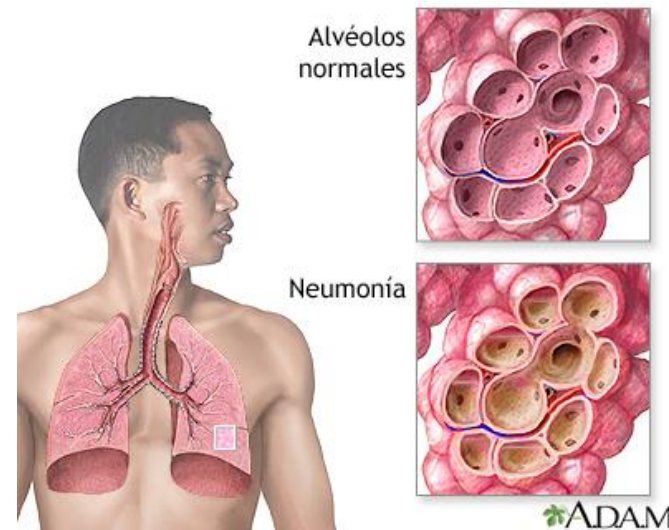
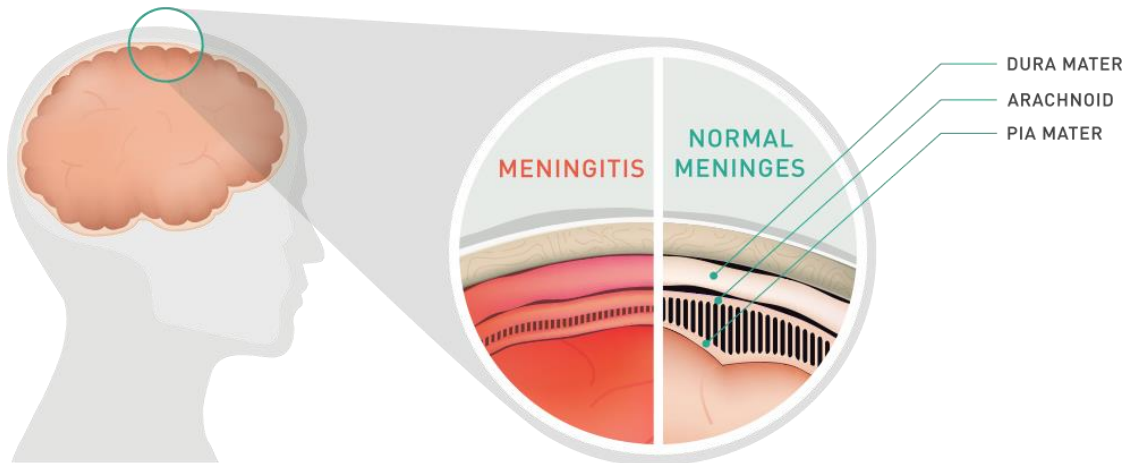
# INTRODUCTION

- Gram negative bacillus, facultative anaerobic, mobile, urease positive, glucose fermenter. Cultures show colonies that are punctate, smooth, mucous and swarming.





- They cause urinary tract infections, enteritis, liver abscesses, meningitis, otitis media and pneumonia.



# CLINICAL CASE

Patient of 34 years. Epileptic

Table of one hour of evolution

Head trauma

Loss of consciousness

Amnesia

Dx of income; Cranioccephalic trauma.

Assessment by neurosurgery confirms the Dx.  
With Frontoparietal Linear Fracture Epidural  
and subdural hematoma.

## Evolution of symptoms

- Headache.
- sickness.
- vomits.
- Unilateral hemiplegia.
- Bladder dysfunction.
- high fever.
- Intracranial hypertension.
- electrolytic imbalance.

## Changes:

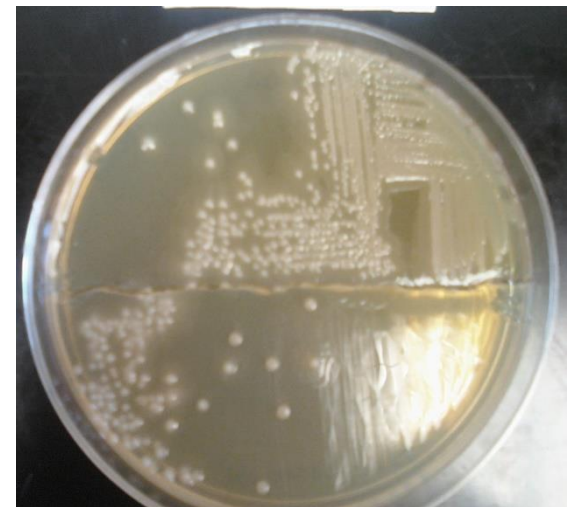
- awareness.
- Respiratory pattern.



On the 4th day he presented Dx of nosocomial pneumonia by isolation of *Proteus mirabilis* and *Enterococcus faecalis*.

## CULTURE

- A culture is made and this confirms the Dx by the enterobacteria. Isolation is performed on *P. mirabilis*.



# BIOCHEMICAL TESTS

- Indol - ←
- Methyl red +
- Vogues-Proskauer -
- Citrate +
- Ác. Sulfhydric +
- Urea +
- Mobility +
- Lysine -
- Ornithine + ←
- FEA +
- Gas +

# ANTIBIOGRAM

Ampicillin	S
Amoxicillin	S
Ticarcillin	S
First-generation cephalosporins	S
Cefoxitin	S
Cefuroxima	S
Gentamicin	S
Tetracycline	R
Chloramphenicol	R
Nitrofurantoin	R



# Bibliography

- Navarro RF, Miró CE, Mirelis OB, “Lectura interpretada del antibiograma de enterobacterias”, servicio de microbiología, Universitat Autònoma de Barcelona. España