



# ارتباط آزمایشگاه و بالین

Medical Laboratory & clinic

ارائه دهنده: الام خسروی

محترم جلسه: دکتر هادی فارسیانی



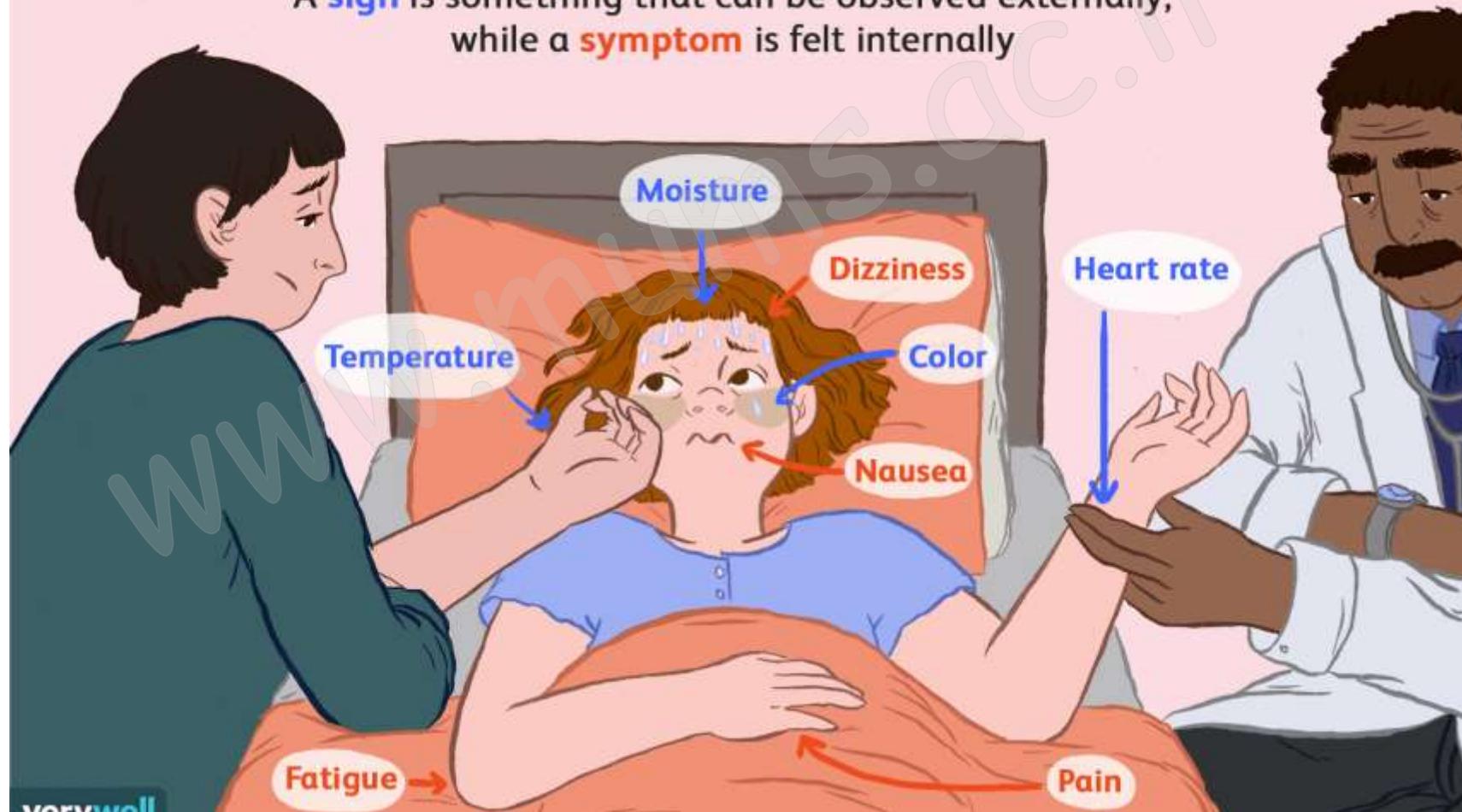


# Chief complaint

SIGNS  
&  
SYMPTOMS

## What is the Difference Between a Sign and a Symptom?

A **sign** is something that can be observed externally, while a **symptom** is felt internally



# Oriented



# DC: Discontinue



**Tachypnea**

**Bradypnea**

**Dyspnea**

**Apnea**



- Age 0-1 year < 30 bpm
- Age 1-3 years < 25 bpm
- Age 3-12 years < 20 bpm
- Age 12-50 years < 12 bpm
- Age 50 and up < 13 bpm

**Tachycardia**

**Bradycardia**

**Arrhythmia**



Toddler (1 to 3 years): 98 - 140 bpm

Preschool (3 to 5 years): 80 - 120 bpm

School-age (5 to 12 years): 75 - 118 bpm

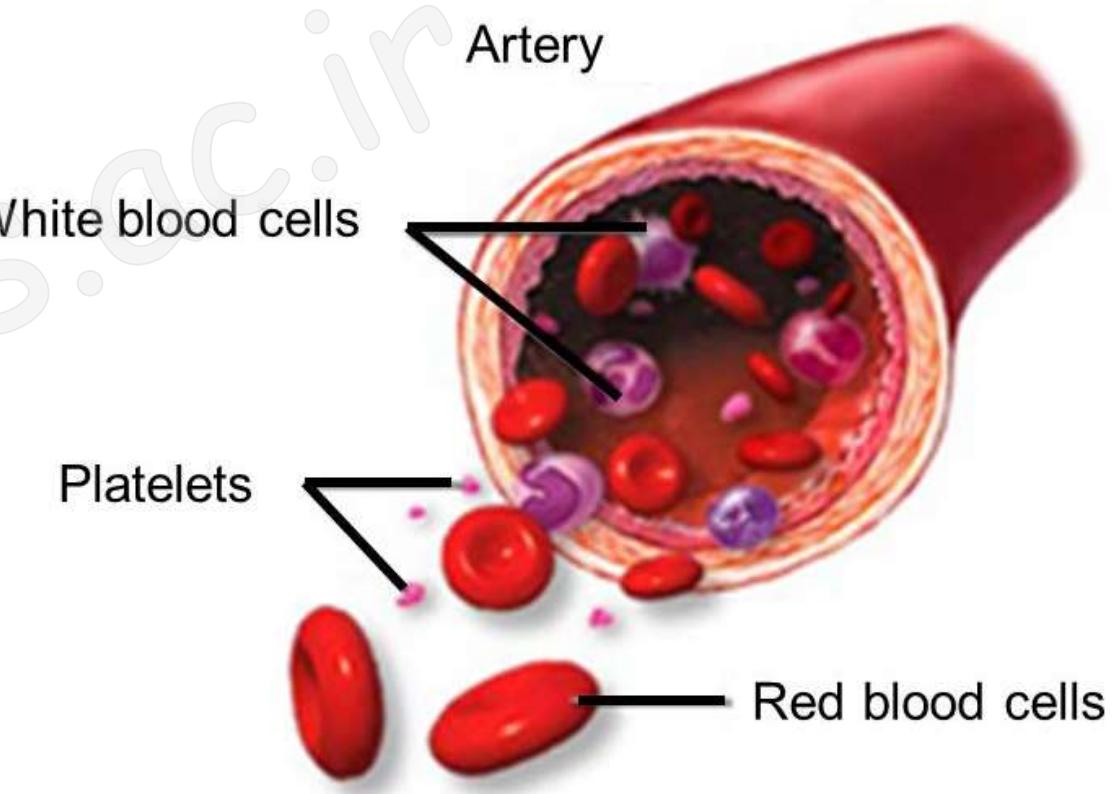
Adolescents (13 to 18 years): 60 - 100 bpm

- Leukopenia and Leukocytosis
- Thrombocytopenia and Thrombocytosis
- Polycythemia and Anemia

Blood



Epistaxis



# Meningitis

FC: febrile convulsion



Brudzinski's sign



chin to chest



# **photophobia**



# **phonophobia**



www.mums.ac.in

## **Relationship Between Common Bacterial Pathogens and Factors Predisposing to Meningitis**

- Age
- Immunocompromised state
- Basilar skull fracture
- Head trauma; after neurosurgery

**PREDISPOSING FACTOR****BACTERIAL PATHOGENS**

Age

&lt;1 mo

*Streptococcus agalactiae, Escherichia coli,  
Listeria monocytogenes*

1–23 mo

*S. agalactiae, E. coli, Haemophilus  
influenzae, Streptococcus pneumoniae,  
Neisseria meningitidis*

2–50 yr

*S. pneumoniae, N. meningitidis*

&gt;50 yr

*S. pneumoniae, N. meningitidis, L.  
monocytogenes, aerobic gram-negative  
bacilli*

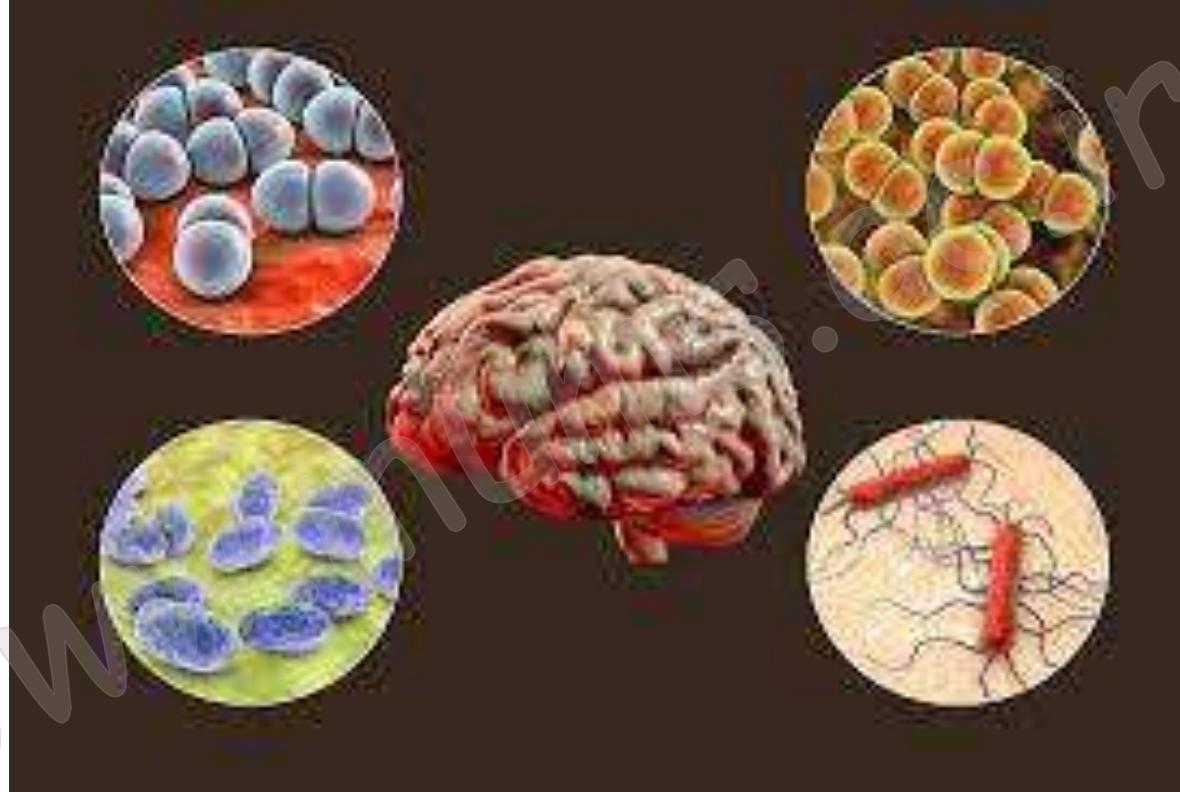
Immunocompromised state

*S. pneumoniae, N. meningitidis, L.  
monocytogenes, aerobic gram-negative  
bacilli (including *Pseudomonas  
aeruginosa*)*

Basilar skull fracture

*S. pneumoniae; H. influenzae; group A  
streptococci*Head trauma; after  
neurosurgery*Staphylococcus aureus, coagulase-negative  
staphylococci (especially *Staphylococcus  
epidermidis*), aerobic gram-negative  
bacilli (including *P. aeruginosa*)*

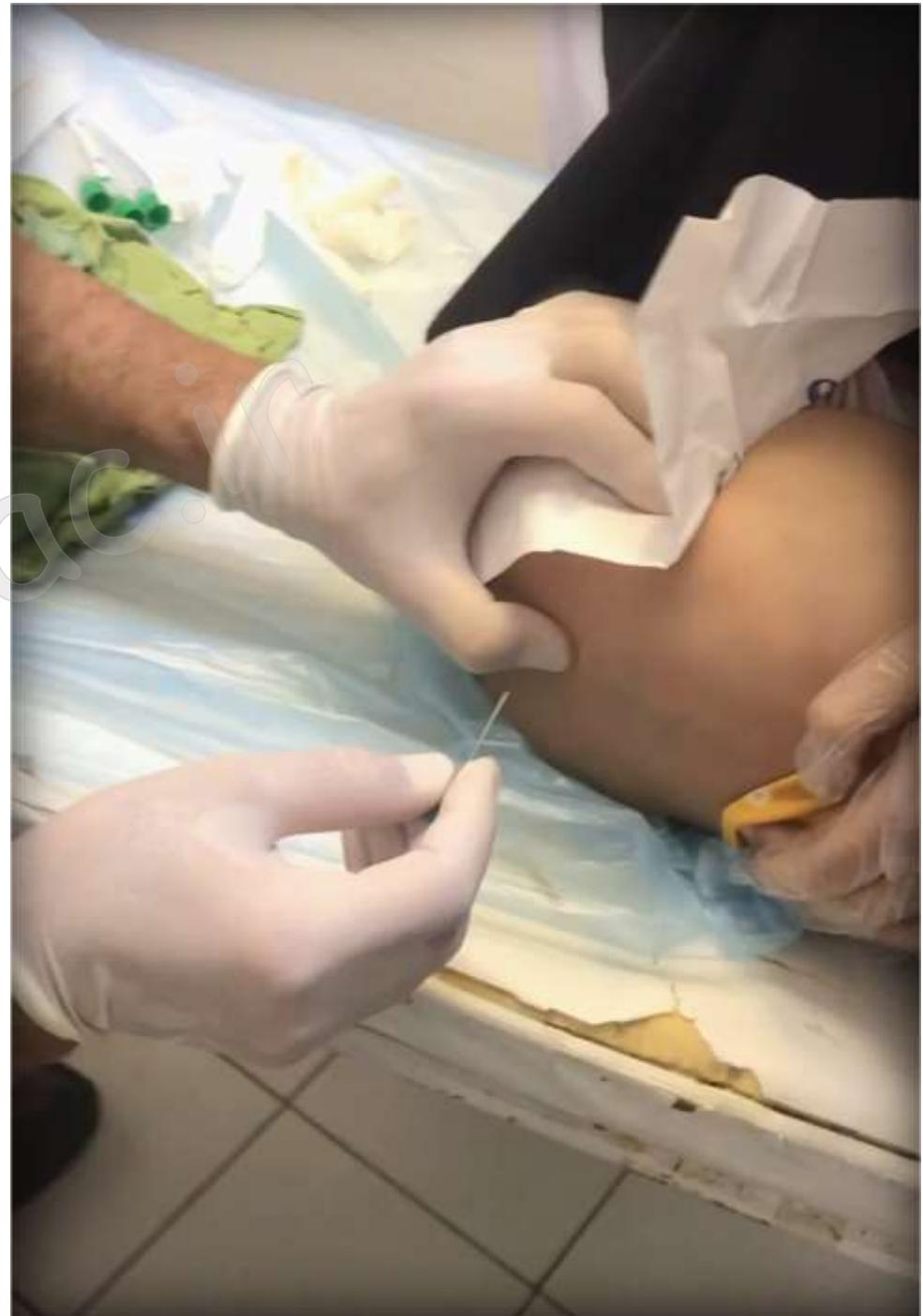
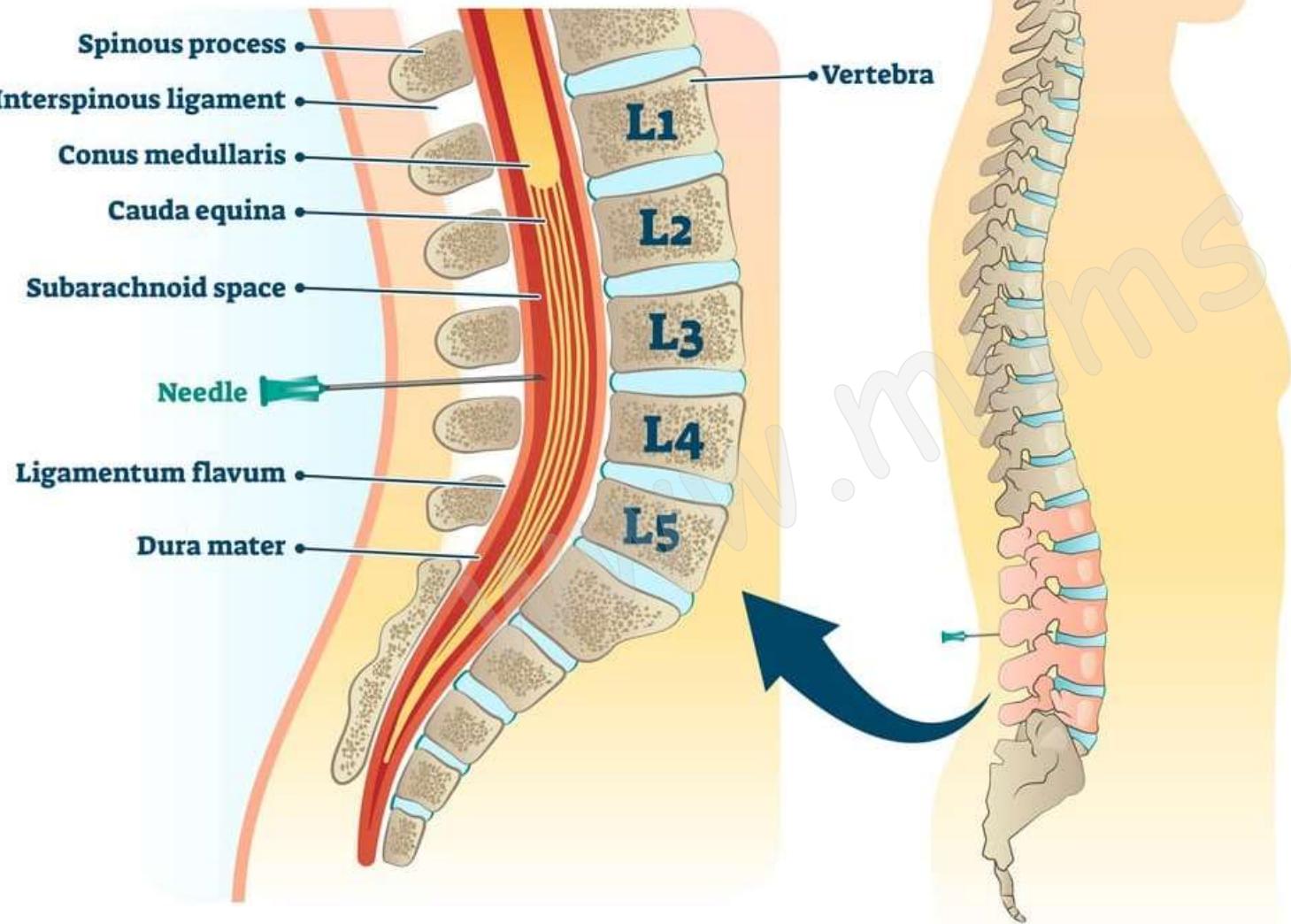
# Acute & Chronic Meningitis



# Chronic Meningitis

- *Mycobacterium tuberculosis* (tuberculosis)
- *Treponema pallidum* (syphilis)
- *Borrelia burgdorferi* (Lyme disease)
- *Tropheryma whipplei* (Whipple disease)
- *Actinomyces* (actinomycosis )
- *Nocardia* (nocardiosis [with brain abscess])
- *Brucella* (brucellosis [rare])

# LUMBAR PUNCTURE



# Intrathecal injection



# spondylitis

Normal spine



Early ankylosing spondylitis



Advanced ankylosing spondylitis



# spondylodiscitis



parrot beak

## بیمارستان امام رضا(ع) - مشهد - آزمایشگاه اورژانس - بیوشیمی اورژانس

شماره پرونده: 109-43-43 , 1  
پزشک معالج:



100100004664937



تاریخ جواب: 1401/10/13 , 15:28:00

نام و نام خانوادگی: خانم [REDACTED] مونث - 82 سال  
 جنسیت و سن: تاریخ درخواست: 1401/10/13 , 13:58:36  
 تاریخ دریافت: 1401/10/13 , 14:10:53  
 درخواست دهنده: CPR تحت نظر - اعدالتیان  
 بخش فعلی: اتفاق یک - تعنت 15 - اعدالتیان - C جنرال

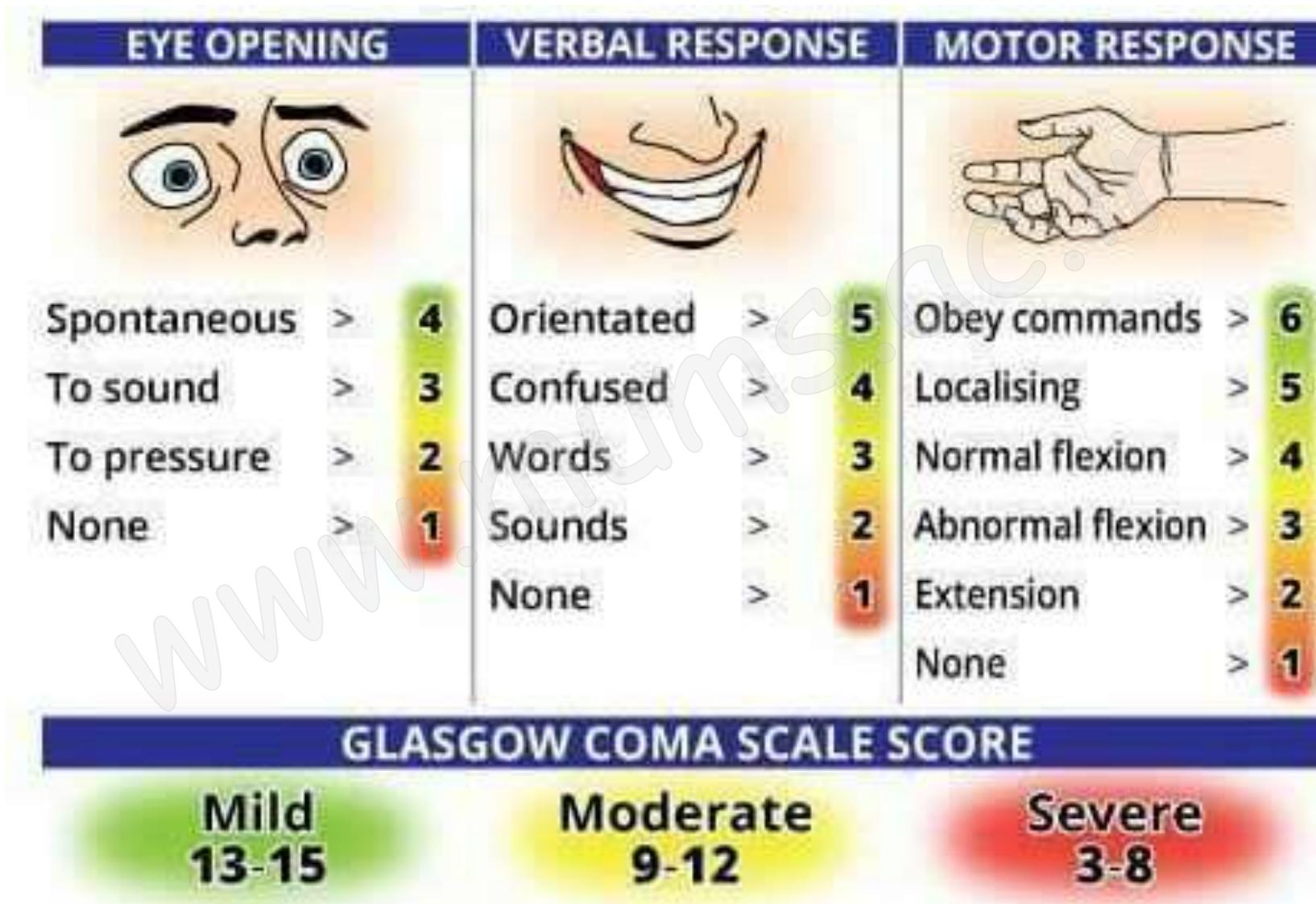
Test Name	Result	Unit	Reference Value
Urea	111	mg/dL	(17 - 45)
Creatinine	2.4	mg/dL	(0.6 - 1.3)
AST (SGOT)	85	U/L	(5 - 40)
ALT (SGPT)	29	U/L	(5 - 40)
ALP	227	U/L	Adults < 258 )
CRP	342.6	mg/L	(0 - 8)
Sodium	132	mEq/L	(135 - 145)
Potassium	4	mEq/L	(3.5 - 5.3)

## BS

BS	134	mg/dL
Comment:		
Total Bilirubin	0.9	mg/dL
Direct Bilirubin	0.2	mg/dL

دکتر حامد صادقان  
 معاون مدیر کلیمکان و آناتومیکال پاتولوژی  
 Lab Director

# GCS: Glasgow Coma Scale



# Antiobiogram

- *Streptococcus pyogenes*
- *Streptococcus agalactiae*
- *Haemophilus influenzae*
- *Moraxella catarrhalis*
- *Neisseria gonorrhoeae*

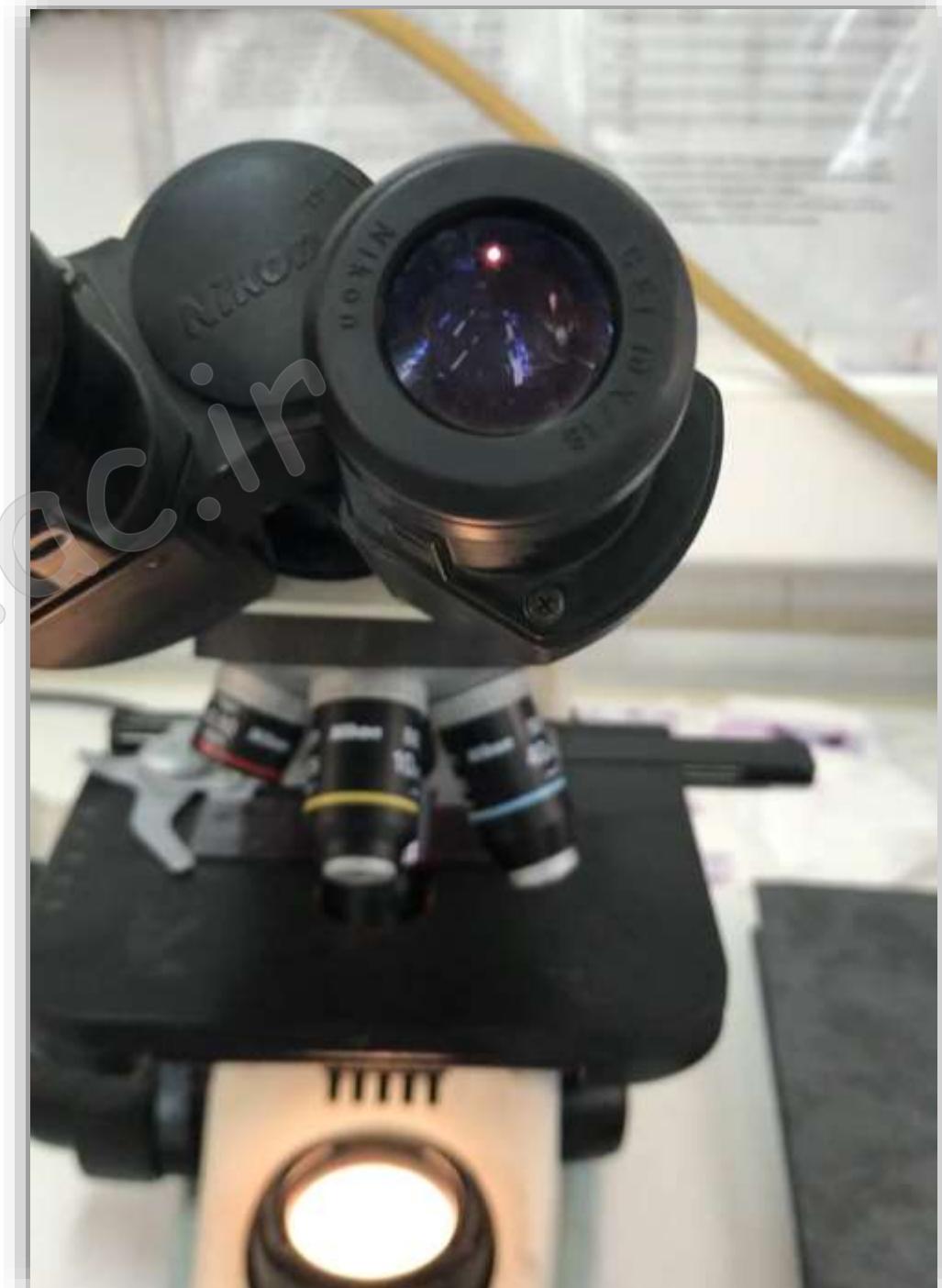


# Campylobacter



**Primary Regimens**

- Imipenem 500 mg IV q6h or  
Meropenem 1 gm IV q8h

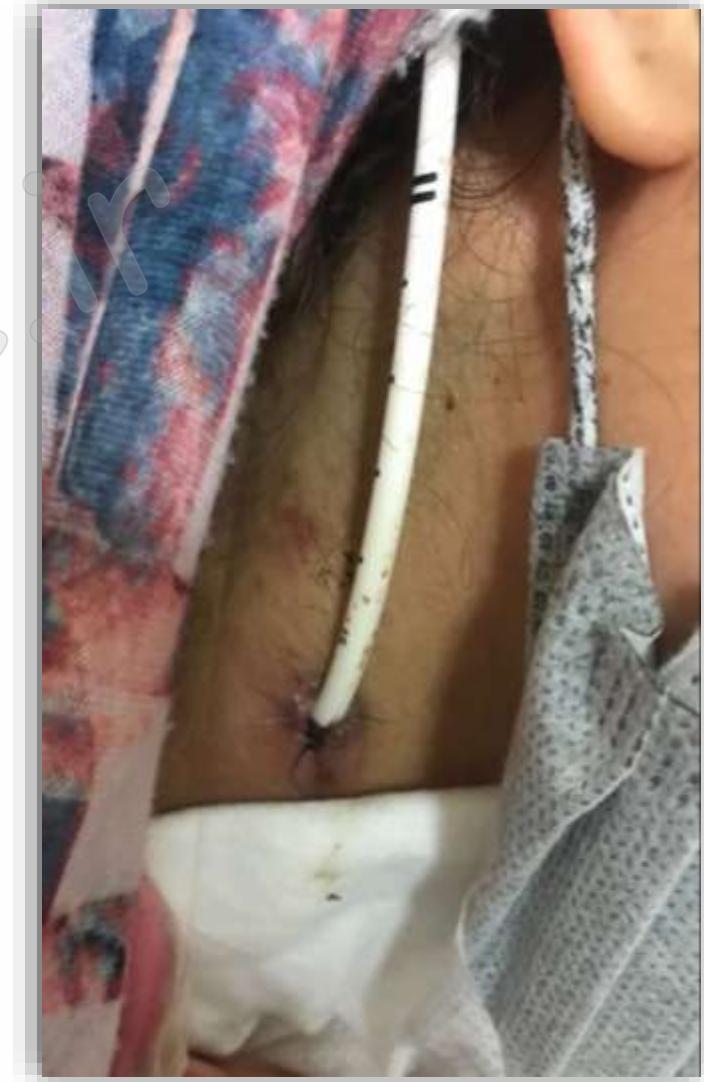


# Probiotic & *C.difficile*

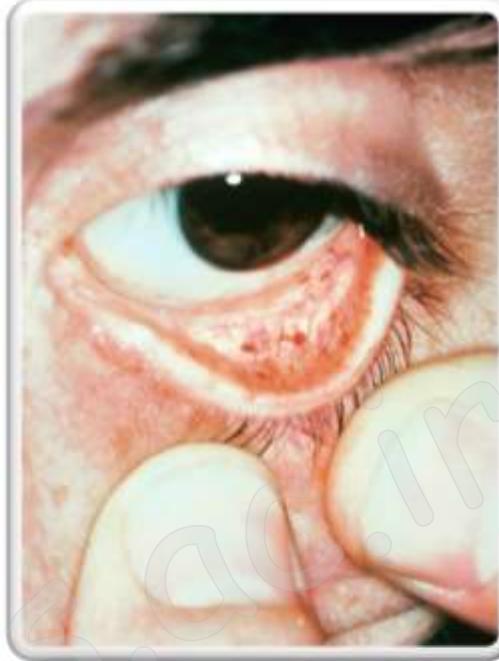


Reference: UpToDate

# catheter-related bloodstream infection



# Endocarditis



# Major & Minor Duke Criteria

- Major criteria: Blood Culture Positive
- Causes of Culture-Negative Endocarditis
- NVS: *Abiotrophia* and *Granulicatella* spp



# shigellosis



# Wound Infection

- *Mycobacterium marinum*
- *Aeromonas spp*
- *Vibrio vulnificus*



# fasciitis necrosante



# Osteomyelitis





با توجه از شما

www.mums.ac.ir