



# Artrite infectioase

Dr Răzvan Ionescu  
Medicină internă Colentina



# Tipuri

- Bacteriene
- Virale
- Fungice
- Spirochete



## Causes of Infectious Arthritis

### Organism

### Clinical clues

Staphylococcus aureus

Healthy adults, skin breakdown, previously damaged joint (eg, rheumatoid arthritis), prosthetic joint

Streptococcal species

Healthy adults, splenic dysfunction

Neisseria gonorrhoea

Healthy adults (particularly young, sexually active), associated tenosynovitis, vesicular pustules, late complement deficiency, negative synovial fluid culture and gram stain

Aerobic gram negative bacteria

Immune compromised hosts, gastrointestinal infection

Anaerobic gram negative bacteria

Immune compromised hosts, gastrointestinal infection

Mycobacterial species

Immune compromised host, recent travel to or residence in an endemic area

Fungal species (sporotrichosis, cryptococcus, blastomycosis)

Immune compromised hosts

Spirochete (*Borrelia burgdorferi*)

Exposure to ticks, antecedent rash, knee joint involvement

Mycoplasma hominis

Immune compromised hosts with prior gastrointestinal tract manipulation



# Bacteriene



# Factori de risc

- Afectare articulara precedenta (AR, proteza)
- Traumatism
- Diabet zaharat (imunopresia)
- Bacteriemia



# Patogenie

- Bacteriile intra usor in articulatie si se “depun” in sinoviala, pe cale :
  - Hematogena (bacteriemie) – 70%
  - Contiguitate (focar de vecinatate)
  - Iatrogen (artrocenteza/-scopie) – 20%
- Articulatiile se apara prost !
  - Poliarticulara (A! endocardita)



# Clinic

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- Monoartrita acuta !
  - +/- Febra
  - +/- Leucocitoza
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- tablouri atipice frecvente !!!



**MONOARTRITA ACUTA ESTE  
SEPTICA PINA LA PROBA  
CONTRARIE !!!**







# Monoartrita acuta

Diagnostic diferencial

- Infectia
- Artrita microcristalina
- Hemartroza (la copil)
- Tumora
- Boala reumatologica sistemica



# Poliartrita acuta

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- Mai frecventa >60 ani
- In medie – 4 articulatii
  - Genunchi, cot, umar, sold
- Foarte frecvent la pac cu AR
- Predomina Stafilococ si Streptococ
- Pronostic rezervat (30% vs 4% deces)



# Lichid sinovial – elementul esential de diagnostic

- Celule:  $>50,000$  leucocite/mmc  
–  $>75\%$  PMN
- Glucoza: mult scazuta
- Cultura: pozitiva (rar in gonococica)

**De folosit ac gros ! (puroiul poate fi viscos – spalatura )**



# Examen radiologic

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- Minima utilitate diagnostica
- Evalueaza lezarea structurilor articulare
- Evalueaza prezenta osteomielitei



Coxita septica la debut



In evolutie



# Tratament

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- Aspiratia continutului articular
  - Zilnic sau mai des (“as needed”)
- Antibioterapie
  - Ideal – dupa antibiograma
  - Empiric :
    - staf, strept, gonococ
    - nosocomiala , proteza – Gram negativi
  - Durata variabila (microorganism si gazda)
- Interventie chirurgicala
  - DOAR daca nu raspunde in 48-72h



# Artrita gonococica

- Produsa de *Naiseria gonhoreae*
- Cea mai frecventa cauza de mono-/oligoartrita la gazda imunocompetenta
- Apare la 1-3% din pacientii infectati cu gonococ



# Artrita gonococica

- F/B = 3/1
- La barbati – bi-/homosexuali
- Factori de risc :
  - Imediat postmenstrual
  - Sarcina / imediat postpartum
  - Deficiente ale sistemului complement (C5-C9)
  - Serotipul 1a

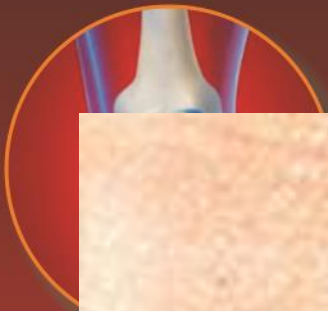




# Clinic

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- **Artrita purulenta**
  - Genunchi, pumn, glezna
  - Culturi sinoviale – pozitive (de obicei)
- **Poliartralgie, tenosinovita, rash**
  - Pumni, degete, glezna
  - Pustule/vezicule nedureroase
  - Febra, stare generala alterata
  - Culturi lichid sinovial – negative (deci, culturi din orice)
- **Combinatia**





# Altele

- ITU joasa concomitenta – 1/4 -1/3 cazuri
- De cautat si HIV, Chlamidia, Treponema
- De testat si partenerul



# Tratament

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- Ceftriaxona 250mg im + Azitromicina 1g po
- Ambele, doza unica
  
- Gentamicina 240mg im + Azitromicina 2g po



# Tuberculoza articulara

- Axiala (spondilodiscita)
  - “abces rece”
  - Rgf – imagine fuziforma paravertebrala
  - Poate fuza la piele pe psoas
- Periferica
  - Artrita / artralgie “mild”
  - Lichid putin inflamator (glucoza, ADA, PCR)



# Tuberculoza articulara

- Anamneza de contact cu bolnav
- IDR fara valoare la vaccinati (test Quantiferon)
- Biopsia sinoviala – cea mai utila (Z-N lichid – negativa)
- Tratament – tuberculostatic, in echipa



**Virale**



# Parvovirus B19

- La 2 sapt de la infectia transmisa respirator
- Tipic: poliartrita simetrica, acuta, MCF, PIF
- La copii: oligoartralgie, asimetrica, genunchi
- Prevalenta mare de FR, ANA, ANCA, anti ADN
- Anti IgM, PCR
- Vindecare intr-o luna fara sechele / AINS





# HIV - specific

- „Painful articular syndrome”:
  - Autolimitata, <24 ore
  - Durere articulara si osoasa, asimetrica, mb inf
  - Rareori evolutie spre artrita
  - Patogenie – necunoscuta
  - Tratament – simptomatic



# HIV - specific

- „HIV-associated arthritis”:
  - Artrita non-eroziva, <6 sapt
  - Prevalenta 0.4-13.8%
  - Aproape exclusiv la barbati
  - Uneori, eroziva si mai lunga
  - Lichid - aseptic
  - Rgf - normala



# HIV - specific

- „Diffuse infiltrative lymphocytosis syndrome”:
- Infiltrare cu LT CD8+
- ↑ parotide, sicca, artralgie
- Extraglandulare: ficat (hepatita), rinichi (pneumonita interstitiala), rinichi (acidoza tubulara renala), SNP (PNP periferica)
- Diferente cu Sjogren: >barbati, <FR, <anti-Ro, <anti-La, <artrita



# Influenta infectiei HIV pe alte boli reumatice

- Artrita septica: rara; Staf, Strepto, oportunisti, mycobacterii atipice
- Artrita psoriazica: la fel de frecventa ca la non-HIV, dar mai severa, mai ales mb inf, in rest la fel ca PsA; mai ales PsO pustulos
- LES, AR: rare la netratati; la copii: boala renala severa; cu inceperea ART, nivel Ac scade
- Immune reconstitution inflammatory syndromes: restaurarea imunitatii ---> boli autoimune (noi/acutizari): sarcoidoza, AR, Still



- Rubeola:
  - 30% la femei, 6% la barbati
  - 0 sapt inainte de rash/la 2 sapt dupa vaccinare
- EBV:
  - artralгии, rar artrita,
  - artic mari, autolimitata



# VHA, VHB, VHC

- Infectia VHA (15%): artralгии
- Infectia acuta VHB (25%):
  - La debut, mai ales la copil: artralgie, simetrica, aditiva, migratorie, cu rash; trec cu icterul
- Infectia cronica VHB:
  - PAN, crioglobulinemie
- Infectia cronica VHC (20%):
  - “AR-like”
  - Crio ++



# Spirochete



# Boala Lyme

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- Produsa de *Borrelia Burgdorferi*
- Transmisa de *Ixodes*
- Incubatie 3-30 zile
- Initial
  - Localizata – “Erythema chronicum migrans”, febra, pseudo-gripala
  - Generalizata – leziuni cutanate, manif. neurologice (VII, radiculopatie, meningita), manif. cardiace (BAV)
- Tardiv
  - Mono/oligoartrita asimetrica intermitenta migratorie
  - 10% artrita cronica articulatii mari



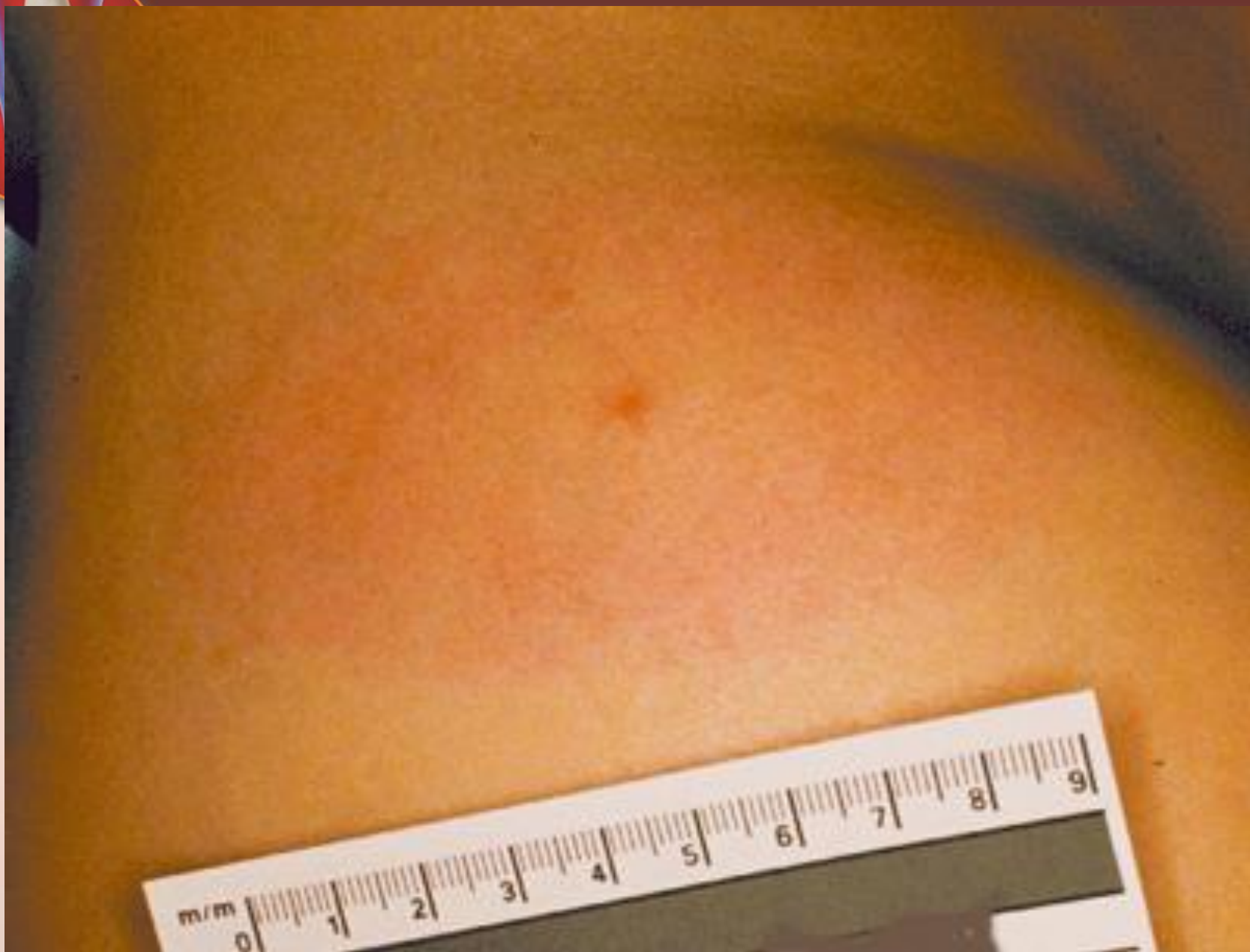
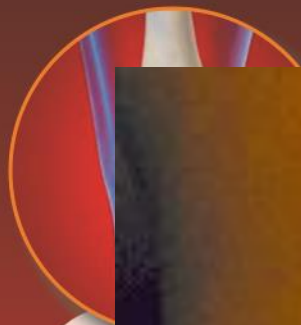


# Boala Lyme

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- Diagnostic
  - Leziunile cutante
  - Screening – testare ELISA
  - Confirmare – testare Western Blot
    - IgM Western Blot – multe fals pozitive
      - Util in primele 4 sapt
    - IgG Western Blot– specificitate inalta
      - Util in stadii tardive







# Boala Lyme

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- **Tratament**
  - Etapa initiala
    - Doxiciclina 200 mg/zi 30 zile
  - Etapa tardiva
    - Antibiotic oral/iv (dupa severitate)
      - Afectare neuro/cardiacă – ceftriaxona 2 g/zi 4 saptamini.
      - Afectarea articulara – antibiotic oral 4 saptamini.



# DECI

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- Monoartrita acuta e septica pina la proba contrarie !
- Examinati lichidul !
- La imunocompromisi – etiologii neobisnuite !
- Orice colectie se dreneaza !
- Ortopedie daca evolutia e proasta !