



Guta

Dr Răzvan Ionescu
Medicină Internă Colentina



Guta

- =artrita periferica prod de depunerea cristale urat de sodiu in una sau mai multe articulatii
- Incidenta = 1-2% (in crestere)
- Cea mai frecventa artrita la barbati



Guta

- Evolutia tipica :
 - hiperuricemia asimptomatica
 - artrita acuta gutoasa
 - perioada intercritica
 - guta cronica tofacee



Fiziopatologie

- Acid uric = produs final al metabolismism purinic
- $\text{Acid uric} + \text{O}_2 + 2\text{H}_2\text{O} \xrightarrow{\text{uricaza}} \text{Alantoina} + \text{H}_2\text{O}_2$
- Uricemia normala = 6mg/dl (pH, temperatura)
- Uricozuria normala = 250-750mg/dl



Fiziopatologie

- Hiperuricemie $\geq 7\text{mg/dl}$
- E frecventa, asimptomatica
- 90% cazuri, e prin perturbarea excretiei renale
- Necesara dar NU suficiente pt guta (depunere)



Clasificare

- Guta primara :
 - “Overproducers”: 10%
 - “Under-excretors”: 90%
- Guta secundara :
 - Turnover celular mare (psoriazis, limfoame, leucemii)
 - Boli genetice rare (sd Lesch-Nyhan)
 - Medicamente



Medicamento care cresc uricemia

Panel 2: Drugs that raise and lower serum urate concentrations^{1,33,52,78}

Drugs that raise serum urate concentrations

- Diuretics
- Tacrolimus
- Ciclosporin
- Ethambutol
- Pyrazinamide
- Cytotoxic chemotherapy
- Ethanol
- Salicylates (low dose)
- Levodopa
- Ribavirin and interferon
- Teriparatide



Medicamente care scad uricemia

Drugs that lower serum urate concentrations

- Ascorbic acid
- Benzbromarone
- Calcitonin
- Citrate
- Oestrogens
- Fenofibrate
- Losartan
- Probenecid
- Salicylates (high dose)
- Sulfipyrazone



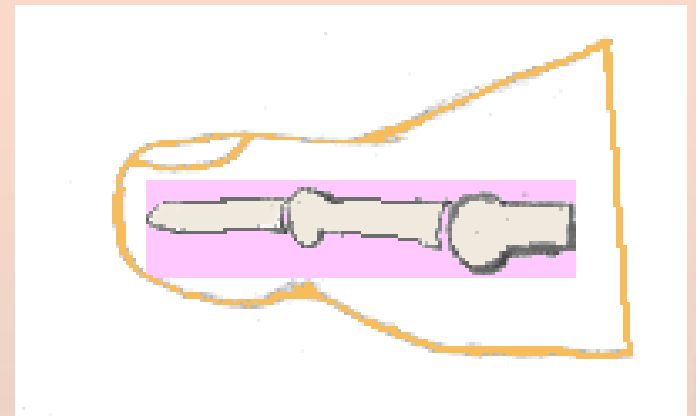
Co-morbiditati

- HTA
- Sdr metabolic : dislipidemie, diabet, obezitate
- Boli CV : IMA, AVC, BAP, ICC



Simptome si semne

- Hiperuricemia asimptomatica
 - Persistenta, creste riscul de guta
- Atacul de guta (artrita acuta)
 - Debut acut, frecvent nocturn
 - Durere extrema
 - Fenomene inflamatorii locale
 - Podagra: MTP1 - clasic
 - Monoarticulara initial
 - Posibil genunchi, pumn, cot , glezna.





Simptome si semne

- Perioada intercritica :
 - Al doilea atac in primul an
 - Rarisim un singur atac.
- Guta cronica tofacee :
 - Rarisim la prima prezentare
 - Tofi gutosi deformanti
 - Risc de aparitie la netratati
 - Depunere interstitiul renal !!!



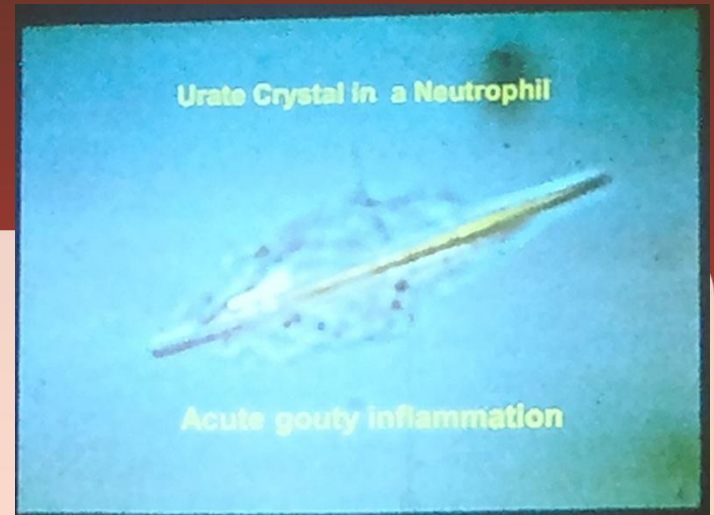


Complicatii

- Litiaza urinara urica
 - Colica renala
- Nefropatia urica
 - Acuta : IRA cu uricozurie crescuta
 - Cronica : IRC (20% din decese)



Diagnostic



- Anamneza si examen clinic
- Confirmat de artrocenteza
 - Lichid inflamator
 - Cristale de urat : aciculare birefringente, libere sau in macrofage sau neutrofile.
- Uricemia ajuta dar e nespecifica !
 - 30% cazuri – uricemie normala
- Uricozurie/24h, sumar urina:
 - <800 mg “underexcertor”; leziune renala tubulara



Diagnostic

- Radiografia

- Acut :

- Tumefacite parti moi.

- Cronic :

- Artrita cronică tofacee (eroziuni)
 - Osteoscleroza cu îngustare spațiu MTF1, IFP4



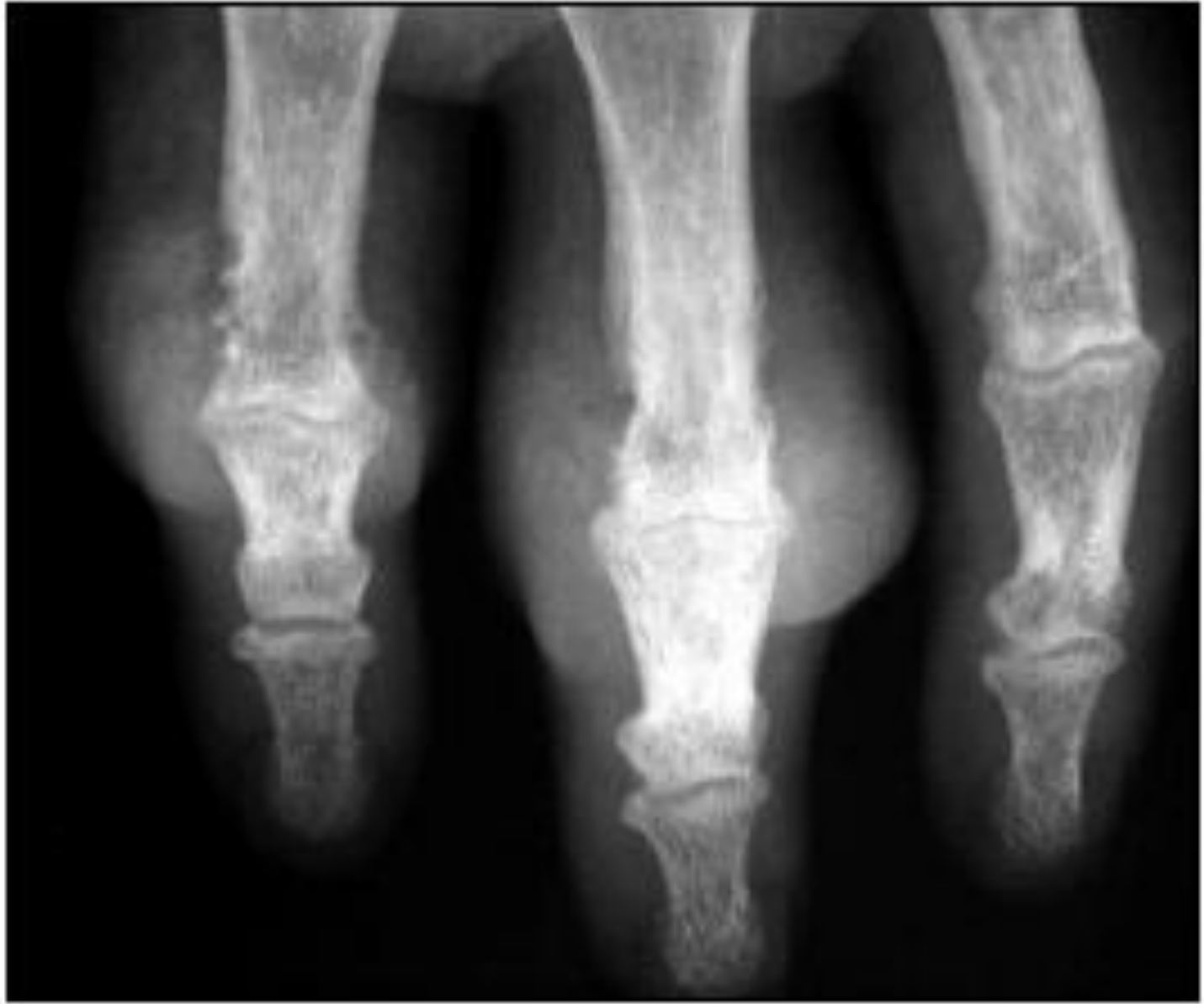
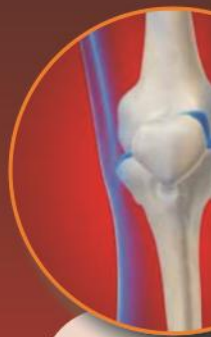


Figure 5: Uritic arthropathy

Soft tissue swelling over the proximal interphalangeal joints of the second and third fingers, and typical extra-articular erosions at the margins of these joints.



Figure 2: Deposits of uric acid (tophi) in the helix of the ear (A) and within the skin overlying the finger joints (B)



Panel 1: EULAR recommendations for the diagnosis of gout^{4,51}

- In acute attacks the rapid development of severe pain, swelling, and tenderness that reaches its maximum within just 6–12 h, especially with overlying erythema, is highly suggestive of crystal inflammation, although not specific for gout
- For typical presentations of gout (such as recurrent podagra with hyperuricaemia) a clinical diagnosis alone is reasonably accurate but not definitive without crystal confirmation
- Identification of monosodium urate crystals in synovial fluid or tophus aspirates allows a definitive diagnosis of gout
- A routine search for monosodium urate crystals is recommended in all synovial fluid samples obtained from undiagnosed inflamed joints
- Identification of these crystals from asymptomatic joints might allow definite diagnosis in intercritical periods
- Gout and sepsis can coexist, so gram stain and culture of synovial fluid should still be done when septic arthritis is suspected even if monosodium urate crystals are identified



- Although the most important risk factor for gout, serum uric acid concentrations do not confirm or exclude gout because many people with hyperuricaemia do not develop gout, and during acute attacks serum concentrations might be within the normal range
- Renal uric acid excretion should be measured in selected patients with gout, especially those with a family history of young-onset gout, with onset of gout at younger than 25 years, or with renal calculi
- Although radiographs can be useful for differential diagnosis and might show typical features in chronic gout, they are not useful for confirmation of diagnosis of early or acute gout
- Risk factors for gout and associated comorbidity should be assessed, including features of metabolic syndrome (obesity, hyperglycaemia, hyperlipidaemia, and hypertension)



Diagnostic diferencial

- Artrita septica !!! (cel mai important)
- CPPD (pseudoguta)
- Artrita psoriazica



Tratament

- Atacul (artrita acuta) :
 - Colchicina 1cp (0,5/0,6mg)x3/zi (repede, A! boala ren cr)
 - Administrare cit mai precoce
 - Se opreste la aparitia ef adverse
 - Se scade la 1cp/zi dupa raspuns
 - Ef adv medulare si la adm iv (necroza, CID, anafilaxie)
 - Atentie la boala renala cr : $Cl < 30 \text{ ml/min}$ atunci $\frac{1}{2}$ cp la 1-2 zile



Tratament

- Atacul (artrita acuta) :
 - AINS
 - Oricare (traditional sau COX2) e la fel de bun
 - Atentie la co-morbiditati
 - Alte optiuni :
 - Inhibitori IL1 (canakinumab)
 - Cortizon sistemic (la fel de eficient !!!)
 - Artrocenteza, evacuare, cortizon (artic mari; A! uneori precipita)



Inceperea terapiei de fond

“Urate lowering drugs”:

- La 1-2 sapt dupa rezolutia atacului acut (ACR2012: “se poate in timpul atacului”).

Preventia acutizarilor in timpul terapiei de fond:

- Colchicina sau AINS pina la atingerea dozei propuse, uneori pina la 12 luni.

Noi atacuri

NU se opreste terapia de fond.



Tratament de fond

- Scop :
 - uricemie $< 6\text{mg/dl}$
- Efecte :
 - Dizolva cristalele
 - Previne recurentele si progresia spre dizabilitate
- Hiperuricemia asimptomatica NU se trateaza !



Tratament de fond

- Modalitati
 - Inhiba formarea acid uric :
 - Inhibitori de xantin-oxidaza
 - Promoveaza excretia de acid uric :
 - Uricozurice
 - Transforma acidul uric in alantoina :
 - Uricaze



Inhibitorii de xantin-oxidaza

- Allopurinol
 - 100-800mg, maj <300mg
 - Ca profilaxie pt sd liza tumorală
 - Ef adverse : acute hypersensitivity sdr (2-10%)
 - HLA B5801; in primele 3 sapt; 20% deces
 - A! la initiere si atac



Inhibitorii de xantin-oxidaza

- Febuxostat
 - 80mg/zi; mai eficient ca Allopurinol
 - Nu necesita ajustare cu Clearance creatinina
 - Ef adv :
 - Creste AST, ALT
 - Posibile evenimente CV (NU se da la BCI, ICC)
 - Nu prod reactii de hipersensibilitate



Uricozurice

- Mai ales pt “under-excretors”
 - Probenecid
 - Sulfinpirazona
 - Benzbromarona
 - (Losartan)
 - (Fenofibrat)
- Mai puțin eficienți, posologie dificilă, A! la IRC
- Cu mai multe reacții adverse



Uricaze

- Foarte eficiente (uricemii $< 1\text{mg/dl}$!!!)
 - Rasburicaza
 - Pegloticaza :
 - Actiune mai lunga
 - Mai putin antigenica
 - Administrare bi-saptaminala
 - Efecte adverse CV



Regim de viata si efectele lui

- Carne, fructe de mare
- Reduce alcoolul
- Scade in greutate
- Scade glucide in dieta
- Creste vitamina C
- Trateaza HTA
- Scade risc guta
- Scade risc guta
- ↓ risc guta si uircemia
- Scade uricemia
- Scade uricemia
- Scade uricemia

Dieta scade uricemia cu cca1 mg/dL

Atentie la medicamente !



Prognostic

- In genral bun cu tratament
- Evolutie mai severa atunci cind debut < 30 ani
- Progresie spre IRC >50% netratati
- Uneori tofii modifica functia articulara (chir)



DECI :

- Artrita frecventa la barbati, produsa de depunerea urat de sodiu.
- Se asociaza cu HTA, sd metabolic, afectare CV
- A! la boala renala cronica
- Colchicina si AINS – de baza pt tratamentul atacurilor
- Educatia pacientului, stilul de viata, tratamentul co-morbiditatilor