Monoartrite : approccio “tascabile”

Dr Marco Fedeli

STUDIO MEDICO
DR. MARCO FEDELI
BE HEALTH, BE HUMAN, BE PEOPLE

Clinica
Moncucco

PLAN

01
CASO CLINICO

02
DIAGNOSI

03
TRATTAMENTO

04
PATIENT MONITORING

05
DISCUSSIONE

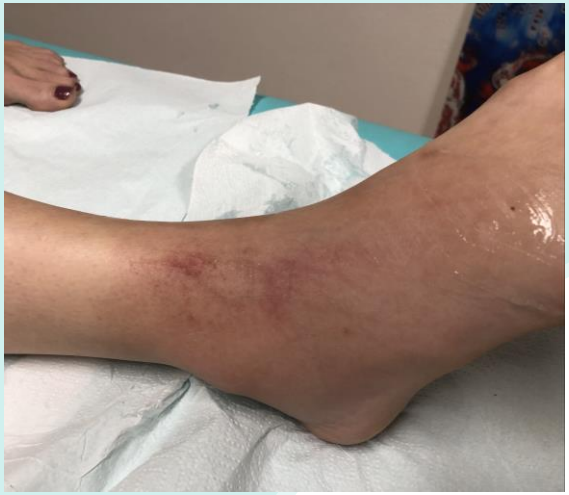
06
RIASSUNTO

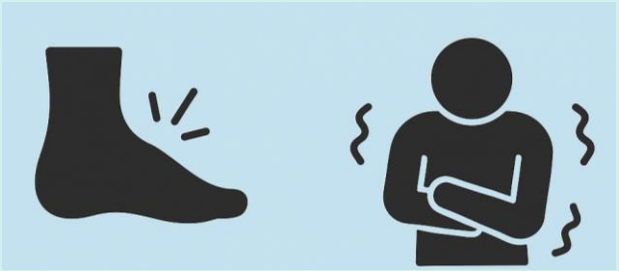
CASO CLINICO 1-INTRODUZIONE

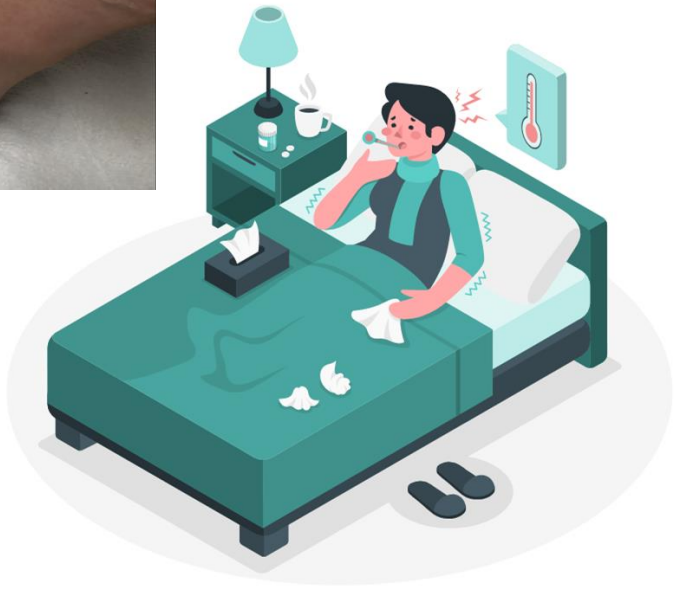
- ♀ 30 anni
- Cistinosi diagnosticata nel 1992 con malattia renale allo stadio terminale e trapianto di rene nel 2003
- Trattamento: Prednisone, Imurek, Advagraf

01

CLINICA



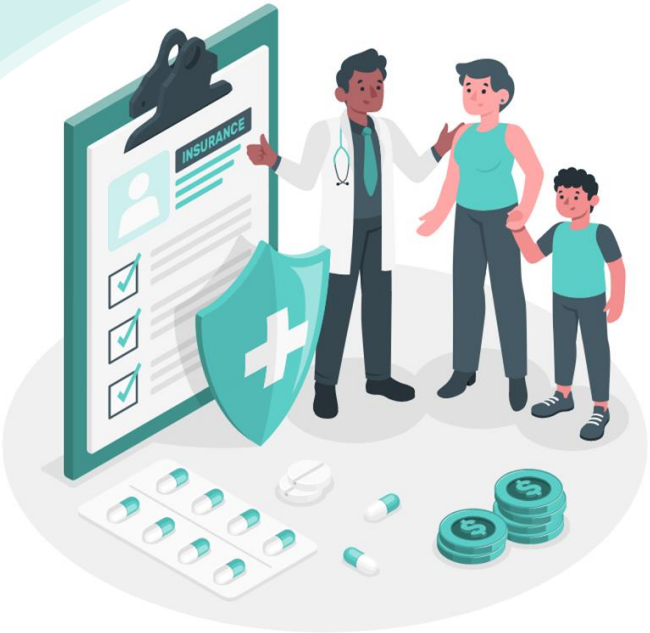




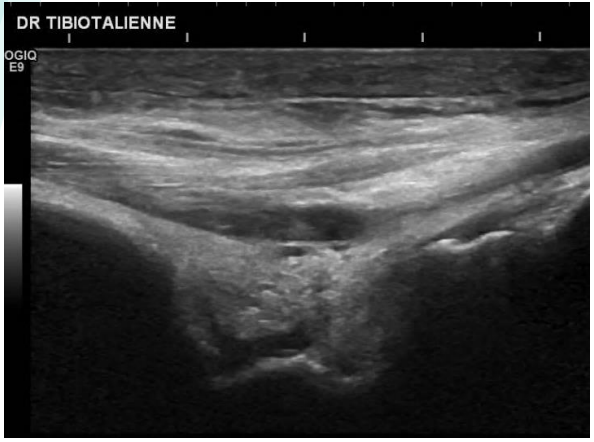
01

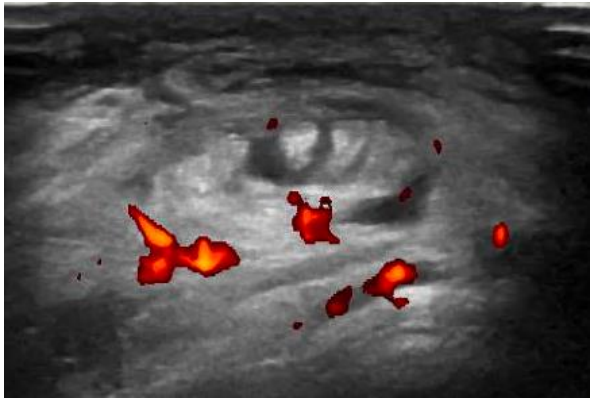
DIAGNOSI

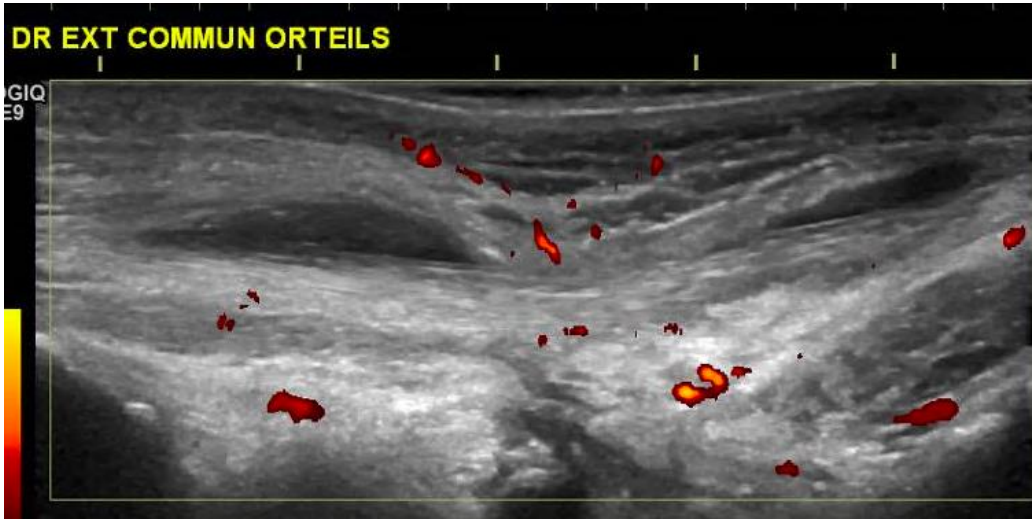
Esame strumentale?



US caviglia







01
DIAGNOSI DIFFERENZIALE

IPOTESI

Infettiva

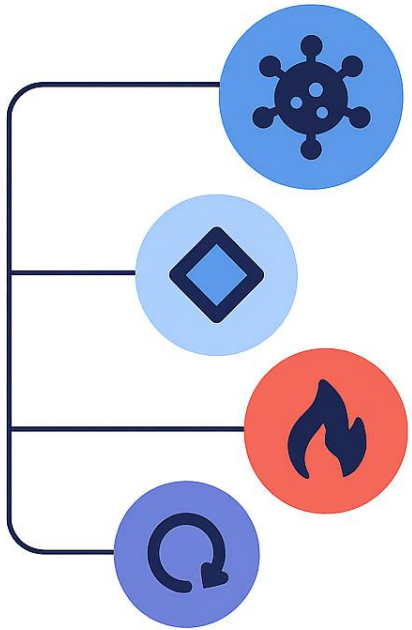
Microcristallina

Reattiva

Infammatoria

Meccanica

Tumorale



Infettiva

BATTERICA

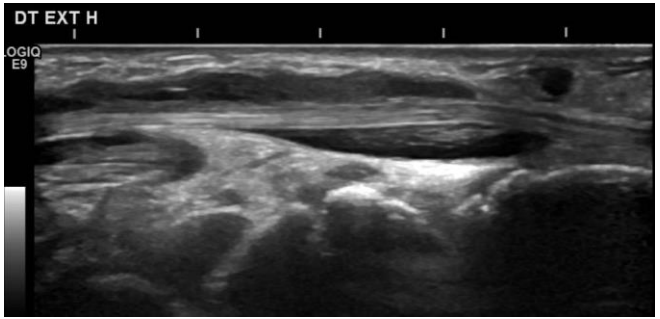
- **St. Aures**, epidermidis, b-emolitico
- TBC
- **Neisseria gonorrhoeae**
- Tropheryma wipplei
- Brucellosi

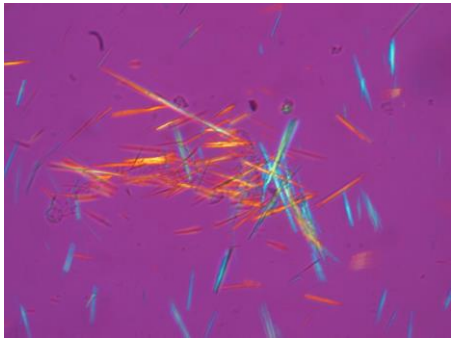
VIRALE

- Parvovirus B19
- Epatiti
- HIV
- Chikungunya

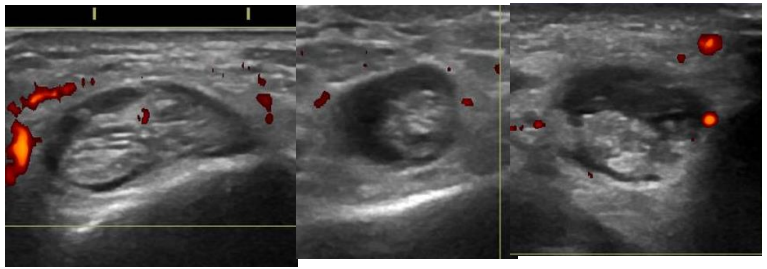
FUNGINEA

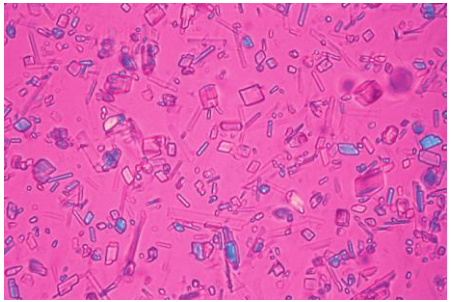
Microcristallina





GOTTA



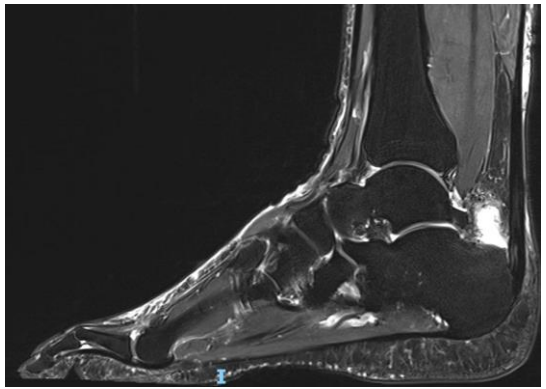


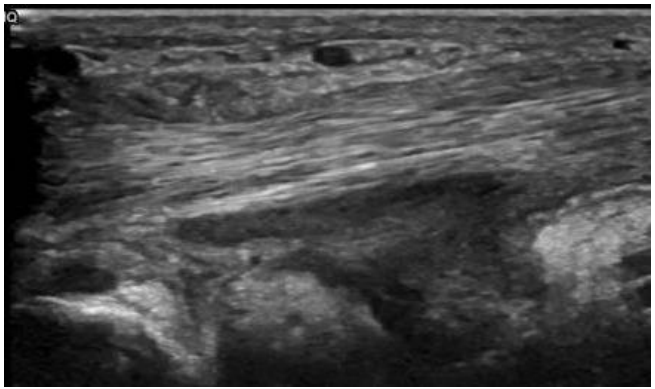
CPPD

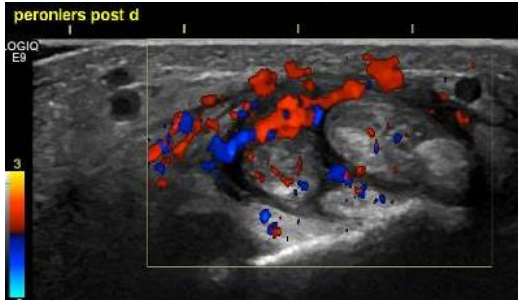
Spondiloartriti (SpA)

Modificato da Proft F et al. Ther Adv Musculoskelet Dis 2018;10:129-39

ARTRITE PSORIATICA







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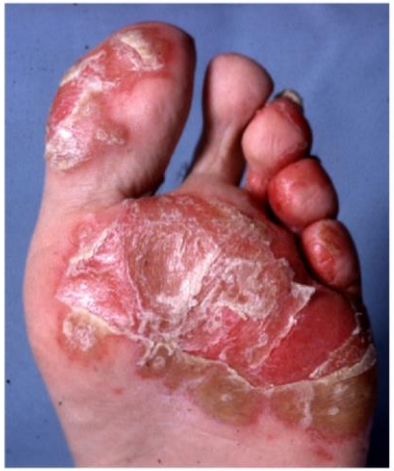
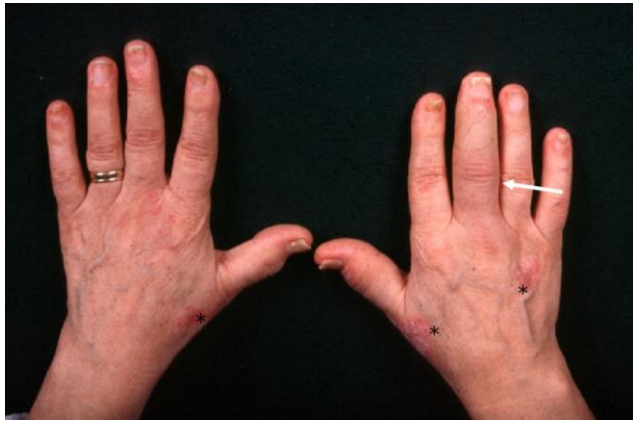
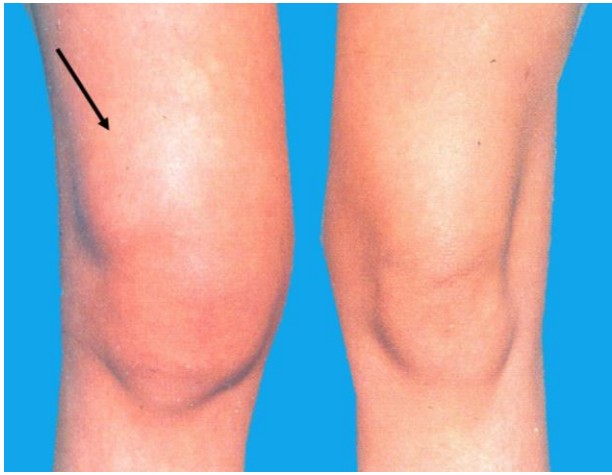
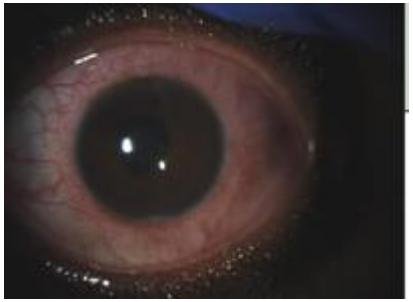








ARTRITE REUMATOIDE

- *Tendini flessori*
  - Perdita della flessione attiva
- Sindrome del tunnel carpale
- *Rottura dei tendini Tendini estensori > Tendini flessori*
- *Prevalenza dal 50 all'80% secondo studi recenti*
- *Popolazione generale: 0-3% di prevalenza di tenosinovite delle piccole articolazioni.*

2010 ACR/EULAR Classification Criteria for RA

JOINT DISTRIBUTION (0-5)	
1 large joint	0
2-10 large joints	1
1-3 small joints (large joints not counted)	2
4-10 small joints (large joints not counted)	3
>10 joints (at least one small joint)	5
SEROLOGY (0-3)	
Negative RF AND negative ACPA	0
Low positive RF OR low positive ACPA	2
High positive RF OR high positive ACPA	3
SYMPTOM DURATION (0-1)	
<6 weeks	0
≥6 weeks	1
ACUTE PHASE REACTANTS (0-1)	
Normal CRP AND normal ESR	0
Abnormal CRP OR abnormal ESR	1

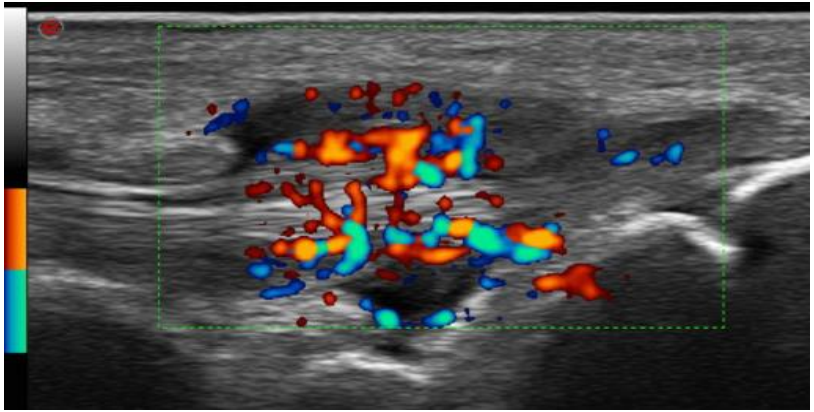
≥6 = definite RA

What if the score is <6?

Patient might fulfill the criteria…

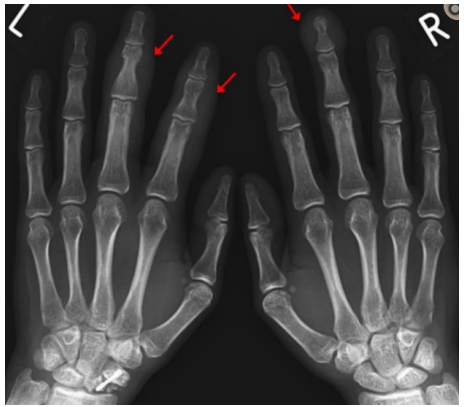
→ **Prospectively** over time (cumulatively)

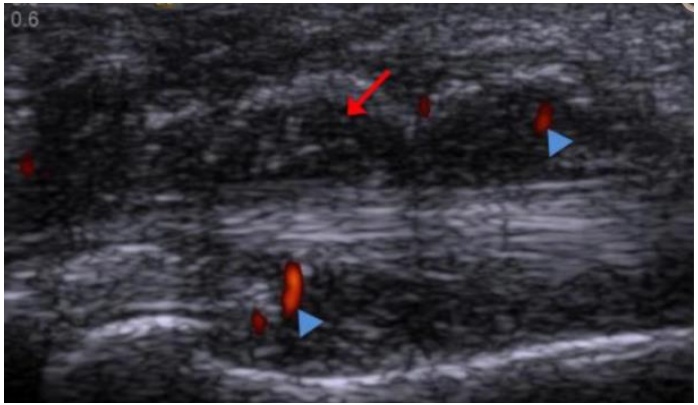
→ **Retrospectively** if data on all four domains have been adequately recorded in the past

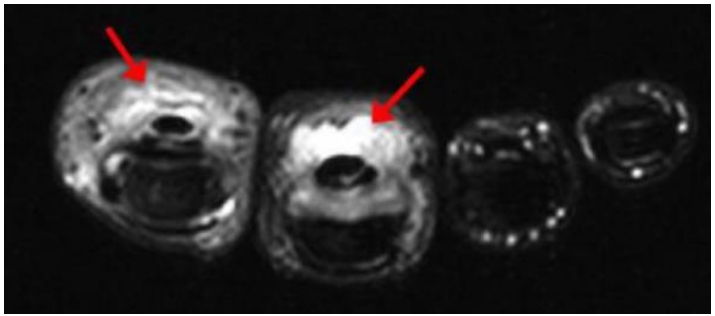


EULAR on-line course on Rheumatic Diseases, Pathogenesis and clinical aspect of rhuematoid arthritis

Sarcoidosi

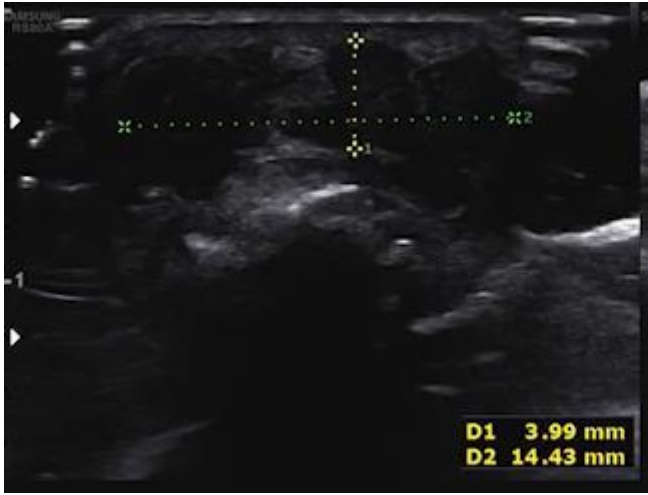


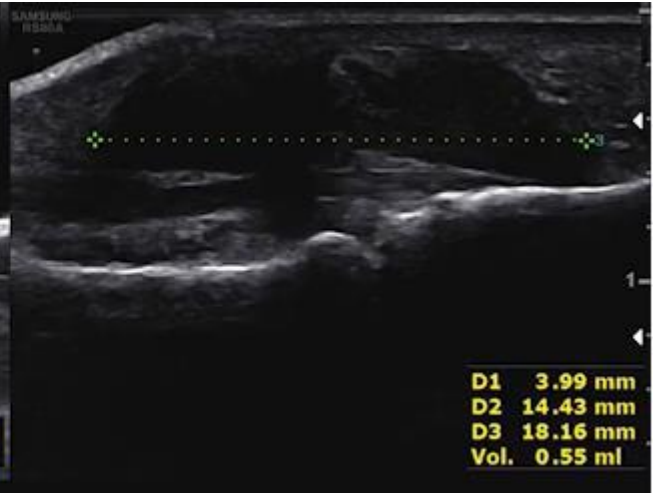




Sarcoid tenosynovitis, rare presentation of a common disease. Case report and literature review. Zeid Al Ani, J Radiol Case Rep 2015

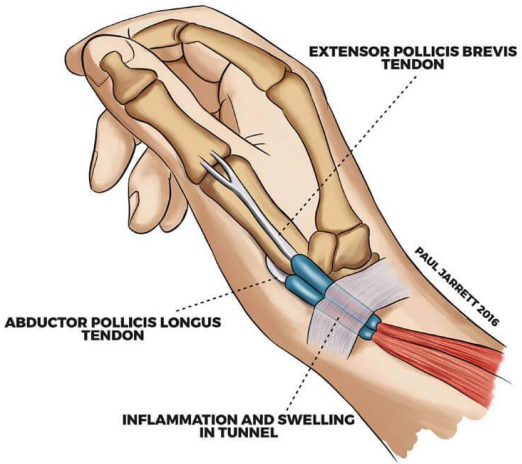
Tumore a cellule giganti delle guaine tendinee





Meccanica

De Quervain



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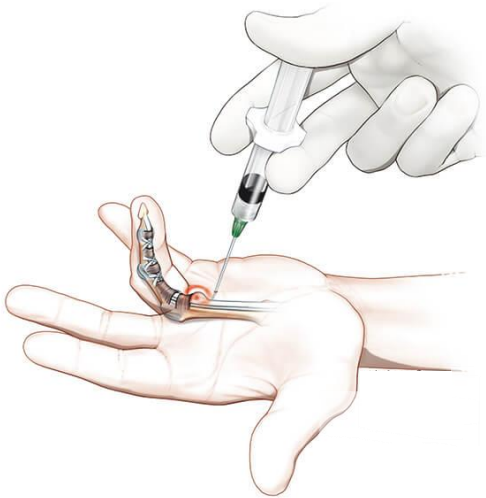
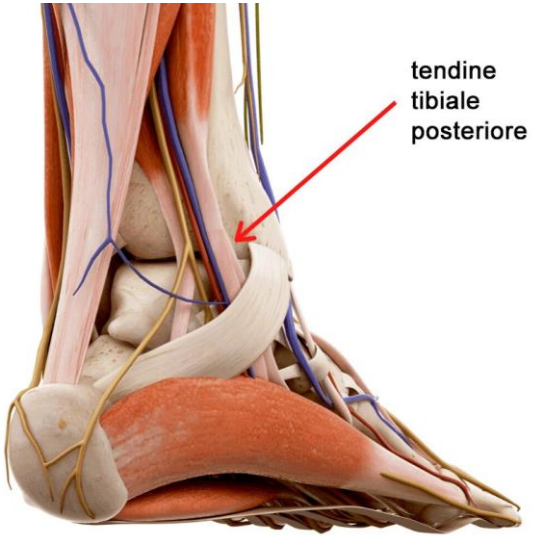
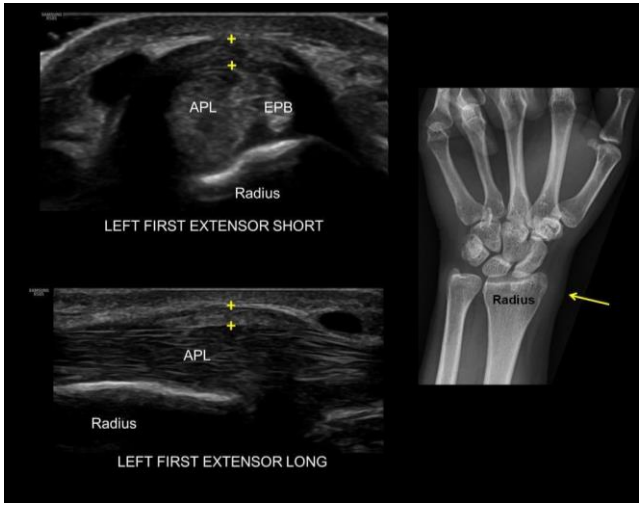


Tibiale posterioriore



Meccanica

De Quervain



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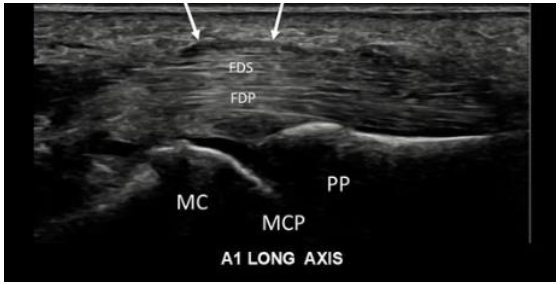
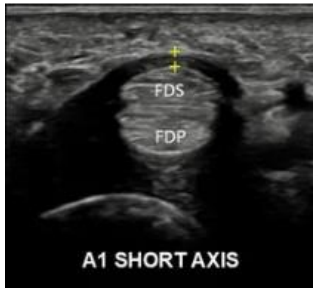
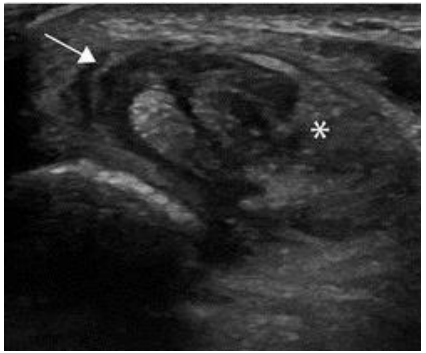
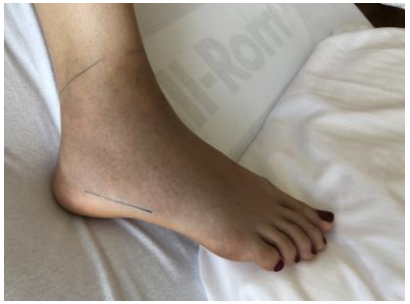


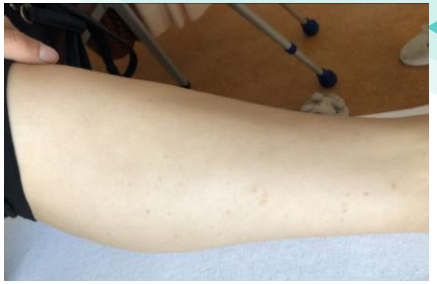


Tibiale posteriore



DIAGNOSI





LABOR

PCR 79 mg/l, VES 45 mm/h, emocolture negative, PCR Gono e chlamidia, Parvovirus B19 negative, FR 30, ACPA, ANA negativi, acido urico 290 mmol/l

MICROSCOPIO

Leuco 8.8 G/L (78% PNN), NO cristalli,
batteriologia negativa

TERAPIA?

Steroidi per via orale e
wait and see

Caso clinico 2

16.02.2023

Duplice stent con accesso radiale destro

03.03.2023

Tumefazione polso destro

ETA': 73

GENERE: Maschio

ALLERGIE: Nessuna

POSIZIONE: Délemont (JU)

REVIEW OF SYSTEMS

DOLORE

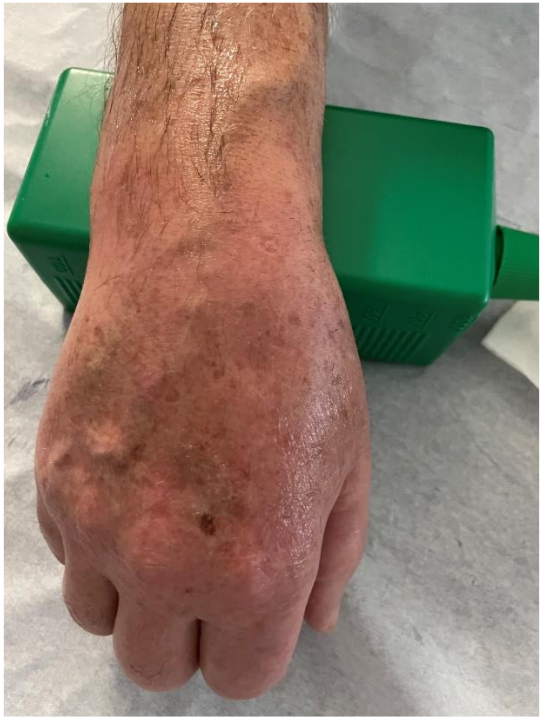
VAS 7-8/10

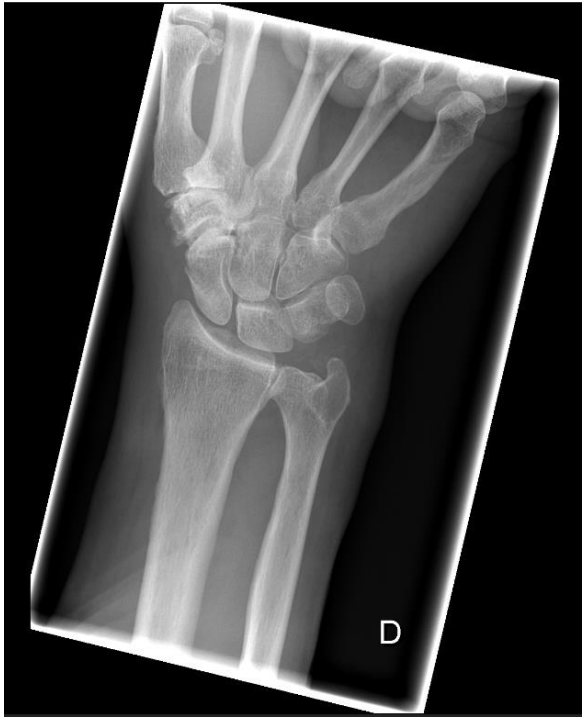
AUSCULTAZIONE CARDIO-POLMONARE : SP

37.9°C

PA 135/90 , Fc 102

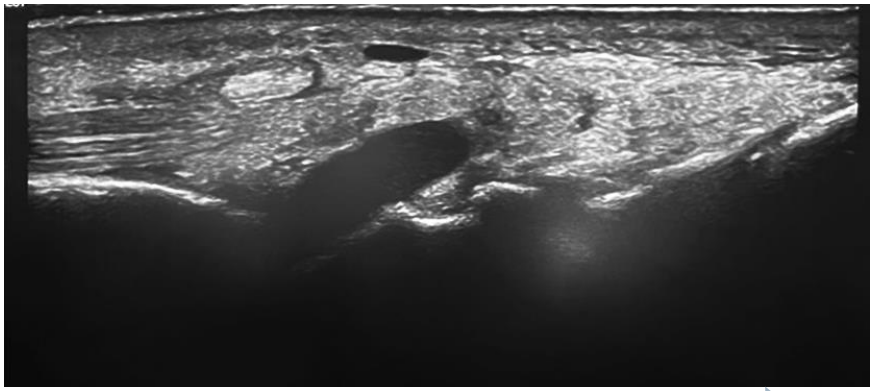
Valutazione clinico/strumentale

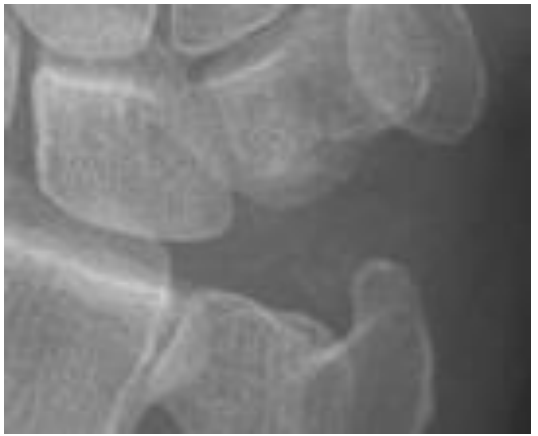


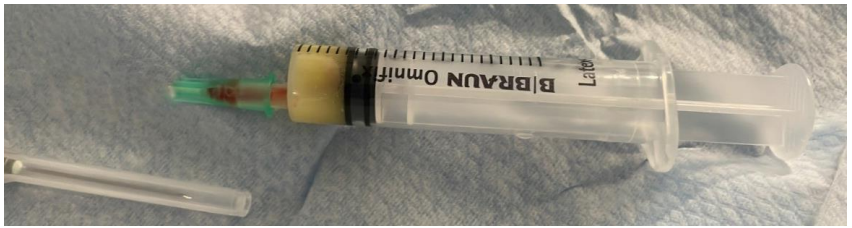


Esame	Risultato
Emocromo	Normale
VES	22 mm/h
PCR	85,7 mg/L
Acido urico	235 umol/L
Procalcitonina	0,04 ugr/L
Sedimento urinario	Nei limiti della norma
Emocolture	In corso

Valutazione clinico/strumentale







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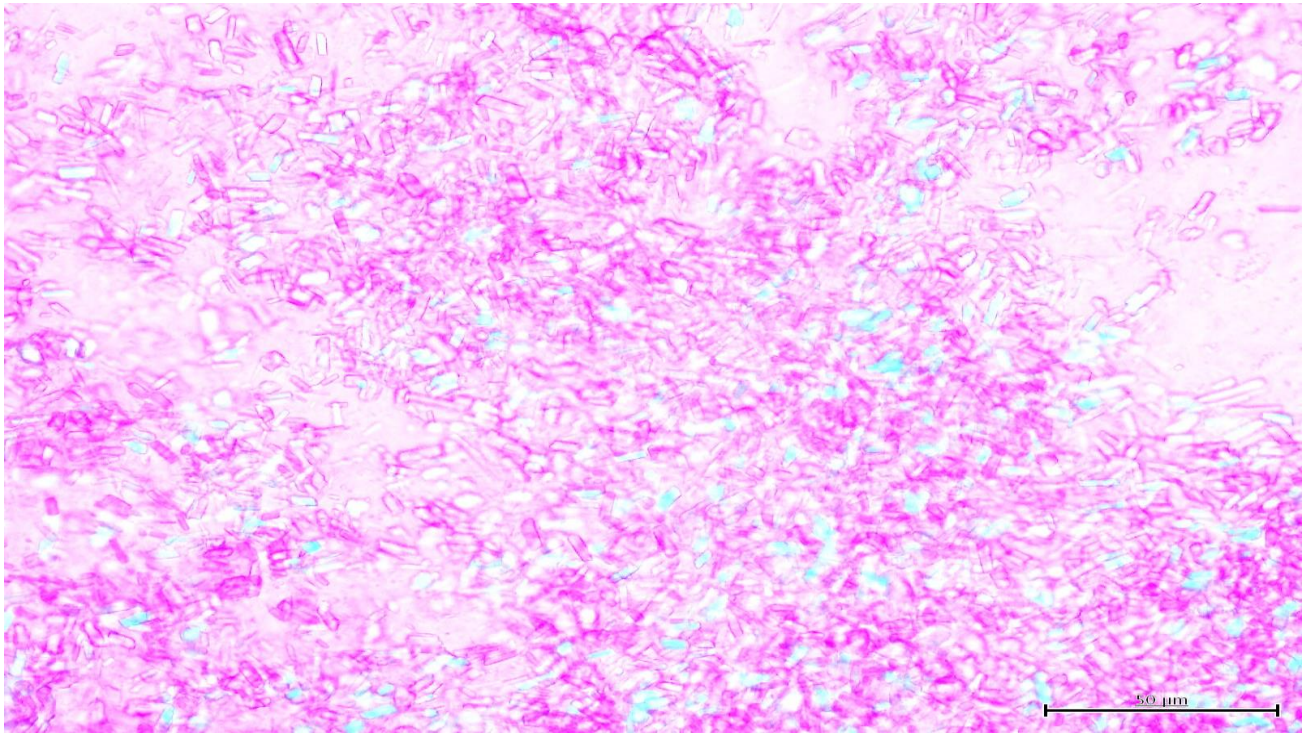
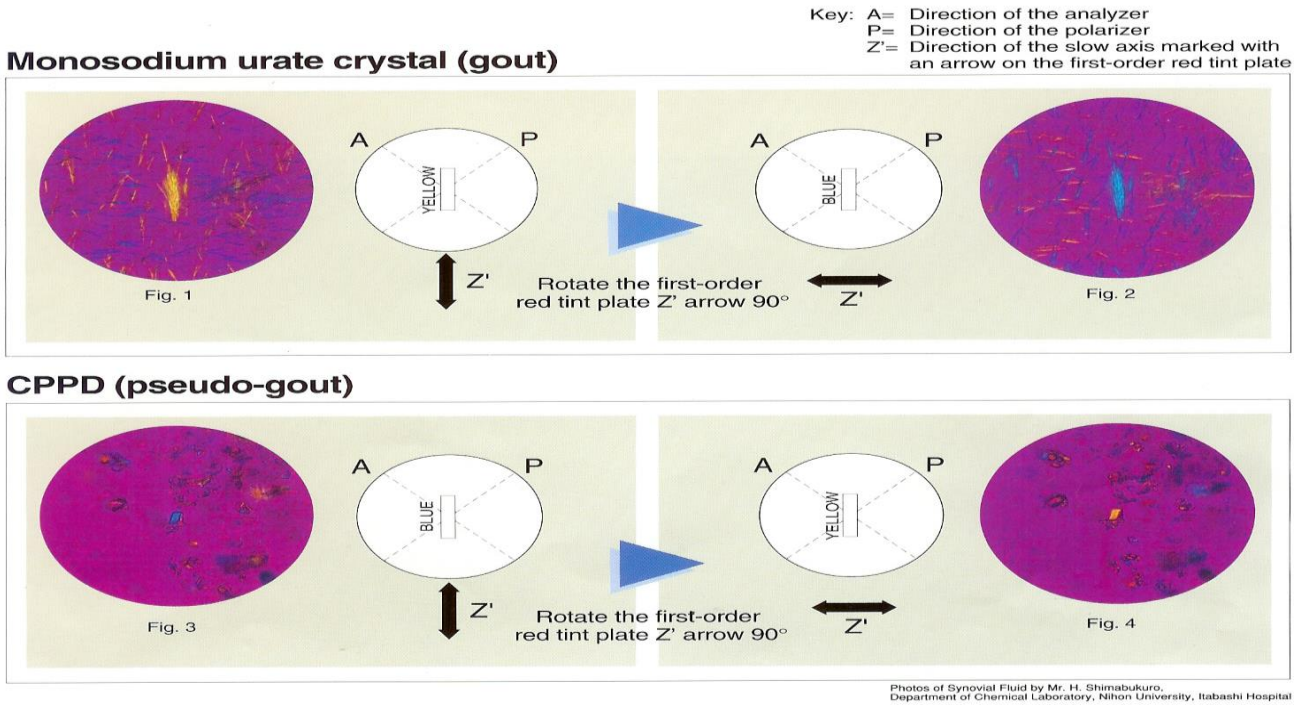
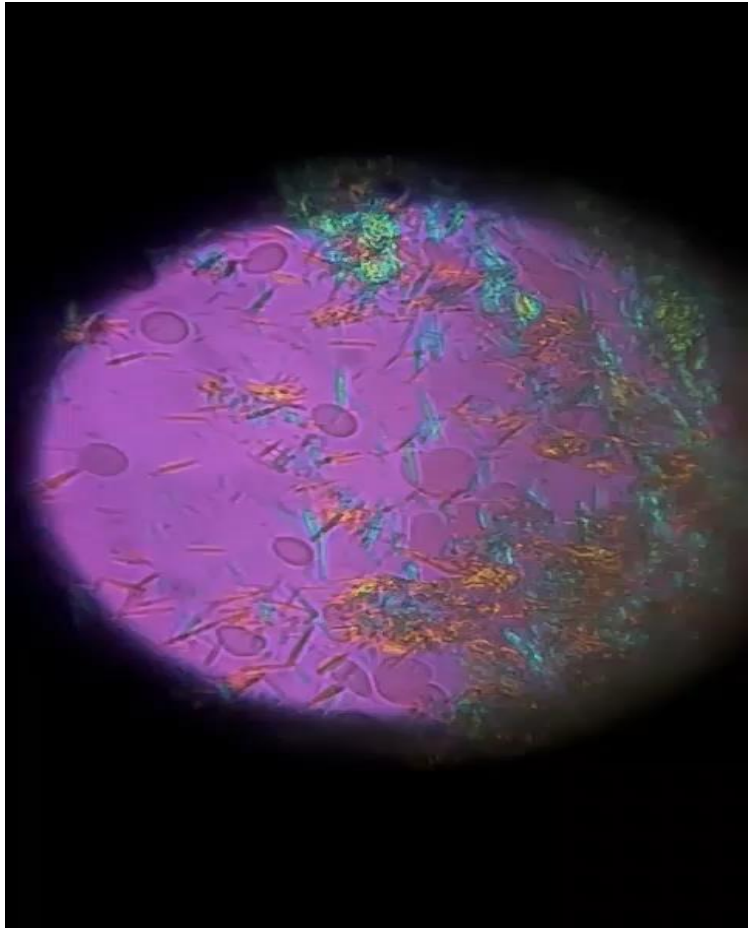


Microscopia





OUR NUMBERS

135’000 /mm3

CRISTALLI +

PCR 85.5 mg/l

Uricemia 235 mmol/l

COME PROCEDIAMO?

LUCA

“ANTIBIOTICO”

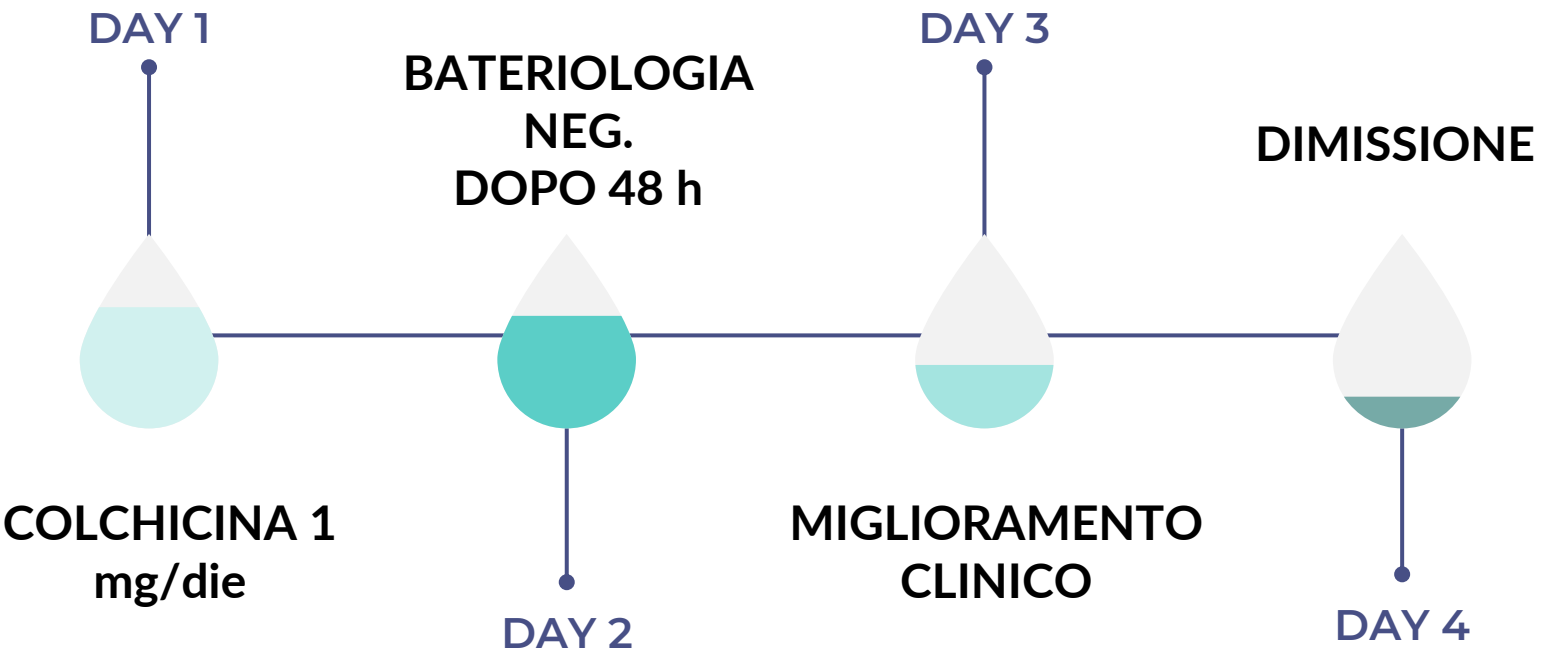
ANNA

“PREDNISONE PER OS”

AGNESE

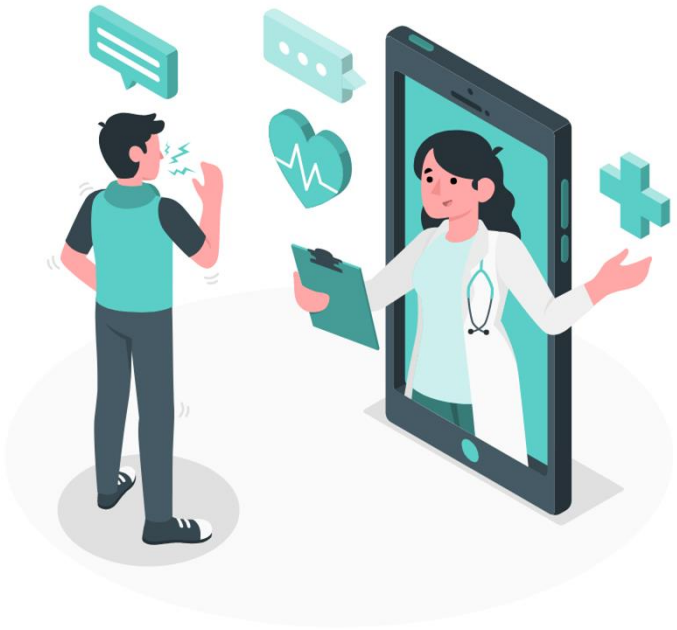
“WAIT AND SEE”

CASE TIMELINE



4

TERAPIA?



Traitements – crise de goutte

- Débuter dès que possible («pills in the pocket») → éducation du patient
- A adapter selon comorbidités
- Combinaisons possibles

Ne **pas** arrêter hypouricémiant !

Traitements – crise de goutte

- Elévation/repos du membre concerné
- Glace

- **AINS** (dose maximale)

Traitements – crise de goutte

- **Colchicine**
  - 1 mg puis 0.5 mg +1h (EULAR)
  - 0.5 mg 2 à 4x/j (BSR)

⛔ Insuffisance rénale sévère

⛔ Inhibiteurs P-gp ou CYP3A4

TABLE 1 Common drugs that interact with colchicine

Strong CYP3A4 inhibitors	Moderate CYP3A4 inhibitors	P-glyco protein inhibitors
Clarithromycin	Cimetidine	Amiodarone
Cobicistat	Ciprofloxacin	Carvedilol
Diltiazem	Cyclosporine	Clarithromycin
Itraconazole	Erythromycin	Itraconazole
Ketoconazole	Fluconazole	Quinidine
Ritonavir	Fluvoxamine	Ranolazine
Telithromycin	Imatinib	Ritonavir
Voriconazole	Verapamil	Verapamil

Slobodnick et al., Rheumatology, 2018

Traitements – crise de goutte

- **Corticostéroïdes**
  - Ponction + infiltration articulaire très efficace (monoarthrite)
  - Systémiques :
    30-35 mg/j pour 3-5 jours (EULAR)
    0.5 mg/kg/j pour 5-10 jours (ACR)

Cosa scegliere?

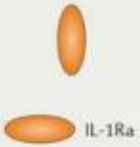
Tableau 5. Les corticoïdes utilisés pour les infiltrations
DCI : dénomination commune internationale.

Corticoïde	Nom DCI (commercial)	Durée d'action	Indications
Action courte	Acétate de méthylprednisolone (Dépo-Médrol)	7 jours	«La bonne à tout faire» : par exemple infiltrations périarticulaires
Action moyenne ou longue	• Acétonide de triamcinolone (Triamcort) • Hexacétonide de triamcinolone (Lederlon, Hexatrione)	• 20 jours • 60 jours	Atteintes inflammatoires chroniques comme : polyarthrite rhumatoïde, spondylarthrite
Action mixte	Phosphate et dipropionate de bétaméthasone (Diprophos, existe en seringue prête à l'emploi)	Composante retard et composante à effet rapide	Utile pour le patient très algique étant donné sa composante rapide

Dudler – Rev Med Suisse 2008

Traitements – crise de goutte

- **Anti-IL1**
  - Anakinra sc 100 mg 1x/j (3 jours)

	Anakinra	Rilonacept	Canakinumab	Gevokizumab
				
Parameter	**IL-1Ra**	**IL-1R/IL-1RAcP-Fc**	**Anti-IL-1β antibody**	**Anti-IL-1β antibody**
Structure	Recombinant protein	Fc fusion protein	IgG1 mAb	IgG2 mAb
Binding to IL-1α	Yes	Yes	No	No
Affinity to IL-1β	None	0.5 pmol	23 pmol	300 fmol
Half life	5 hours	8 days	26 days	22 days
Dose	100 mg daily	160 mg/week	4 mg/kg/4–8 weeks 150 mg single dose	–

Traitements - hypouricémiants

- Indication :

	ACR 2012	EULAR 2016	BSR 2017
Nombre de crises	≥2/année	≥2/année	≥2/année
Tophi	Oui	Oui	Oui
Arthropathie goutteuse	Non	Oui	Oui
Antécédent d'urolithiase	Oui	Oui	Oui
Insuffisance rénale chronique	IRC 2 ou plus	Oui	Oui si eGFR<60ml/min
Age de début	Non	<40 ans	Jeune
Taux d'urate	Non	>8.0mg/dL	Non
Hypertension	Non	Oui	Non
Cardiopathie ischémique	Non	Oui	Non
Insuffisance cardiaque	Non	Oui	Non
Traitement diurétique	Non	Non	Oui

Traitements - hypouricémiants

- **Concepts** :

360 µmol/l
(300 µmol/l)

- **«Start low go slow»**

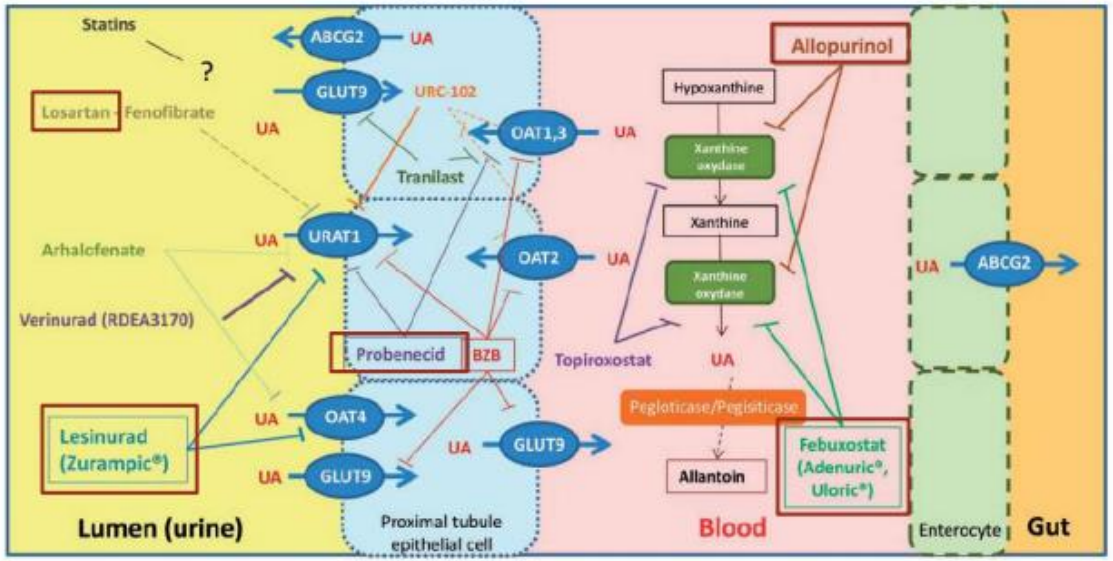
- Education thérapeutique
- Contrôle régulier du taux d'urate et adaptation du traitement
- Prophylaxie des crises de goutte

Traitements – prophylaxie crises

- Durée 6 **mois** ou 3-6 mois après atteinte urate cible
- 1er choix : **colchicine** 0.5 - 1 mg/j 
  - Si IRC (GFR 30-60 ml/min) : 0.5 mg/j (BSR)
  - Si IRC (GFR 10-30 ml/min) : 0.5 mg 1j sur 2-3
- 2ème choix : **AINS** faible dose + IPP
- 3ème choix : **prednisone** (≤ 10 mg/j)

Traitements – hypouricémiants

FIG. 3 Schematic mechanisms of action of current and future urate-lowering drugs



UA: uric acid; BZB: benzbromarone; ABCG2: ATP binding cassette subfamily G member 2; URAT1 or SLC22A12: urate transporter 1 or solute carrier family 22 member 12; OAT: organic cation transporter; GLUT9 or SLC2A9: solute carrier family 2 member 9.

Pascart et al., Rheumatology, 2018

Traitements – hypouricémiants

- **Allopurinol**
  - Traitement de 1ère ligne
  - Débuter à 100 mg/j (50 mg/j si IR)
  - Augmenter de 100 mg/j toutes les 3-5 sem. (50 mg/j si IR)
  - Dose maximale 900 mg/j (et non 300 mg/j)
  - Dose maximale à ajuster à fonction rénale
  - Prix : 20 CHF la boite de 100 cpr à 300 mg

TABLE 2 Dose of allopurinol required to achieve target urate based on pretreatment serum urate concentration

Pretreatment plasma urate (mmol/l)	Predicted allopurinol dose (mg/day) to achieve urate 0.36 mmol/l	Predicted allopurinol dose (mg/day) to achieve urate 0.30 mmol/l
0.65	405	775
0.6	335	665
0.55	265	554
0.5	195	443
0.45	126	332

Stamp et al., Rheumatology, 2018

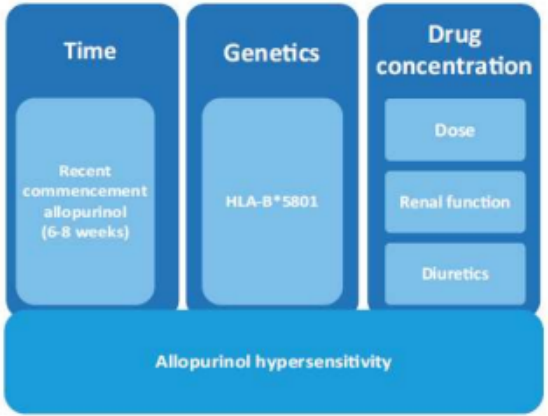
Traitements – hypouricémiants

- **Hypersensibilité à l'allopurinol**

  Dépistage HLA-B*5801 chez patient à haut risque (ACR)

  Débuter à faible dose chez IR

Fig. 2 Risk factors for allopurinol hypersensitivity reactions



Stamp et al., Rheumatology, 2018

Traitements – hypouricémiants

- **Febuxostat**
  - Débuter à 40 mg/j
  - Augmenter à 80 mg/j (voire 120 mg/j) si cible pas atteinte après 4 semaines
  - Pas d'adaptation à la fonction rénale
  - Si échec ou intolérance allopurinol (🇨🇭)
  - Prix : 135 CHF la boite de 98 cpr à 80 mg

Traitements – hypouricémiants

- **Probénécide**
  - Débuter à 250 mg 2x/j pendant 1 sem puis
  - Augmenter à 500 mg 2x/j
  - CAVE : bonne hydratation, urines pH 6.5-6.8
  - CI : ATCD néphrolithiase
  - Si échec ou intolérance hypouricémiant
  - Prix : 60 CHF la boite de 100 cpr à 500 mg

Treatment-hypouricémiant

Benzbromarone (Desuric®)

- Uricosurique en monothérapie ou combinaison

(pas disponible en)

- Comprimés de 100 mg (100-200mg /j)
- Suivre fonction hépatique car cas décrites d’atteinte hépatique grave

Traitements – hypouricémiants

- **Lésinurad**
  - Dose : 200 mg/j
  - CI : GFR <30 ml/min
  - En association avec allopurinol ( )
  - Prix : 100 CHF la boite de 100 cpr à 200 mg

Rasburicase (Fasturtec®)

- **Goutte tophacée sévère (Lyse tumorale)**

- **Effets secondaires**

(réactions allergiques - 25%, Hémolyse, anticorps neutralisants - 65% patients)

- **Coût élevé**

DISCUSSION

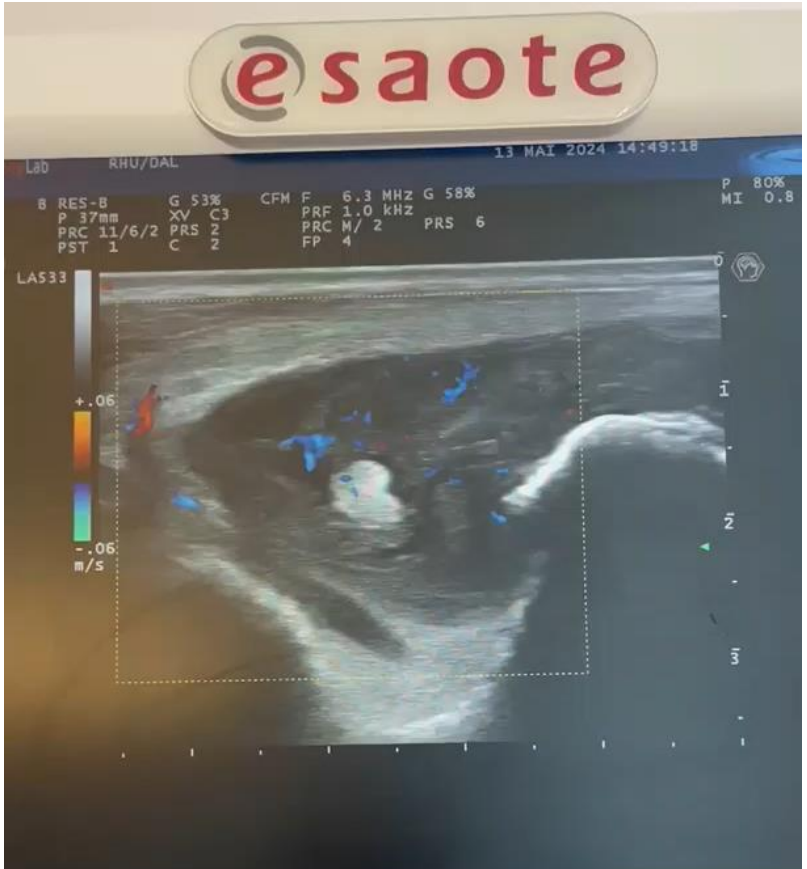
1. La presenza di cristalli può **ESCLUDERE** l'artrite settica?

2. Il limite dei 50.000 G/l può essere giudicato **SEMPRE** affidabile per diagnosticare una artrite settica?

CASO CLINICO 3

- ♀ 49 anni
- Dopo trauma contusivo gomito destro
- Tumefazione gomito destro e ridotta funzionalità articolare

US gomito


esaote
Lab
RHU/DAL
13 MAI 2024 14:49:18
B RES-B
P 37mm
PRC 11/6/2
PST 1
G 53%
XV C3
PRS 2
C 2
CFM F
6.3 MHz G 58%
PRF 1.0 kHz
PRC M/ 2
PRS 6
FP 4
P 80%
MI 0.8
LA533
+.06
-.06
m/s

OUR NUMBERS

44’000 /mm3

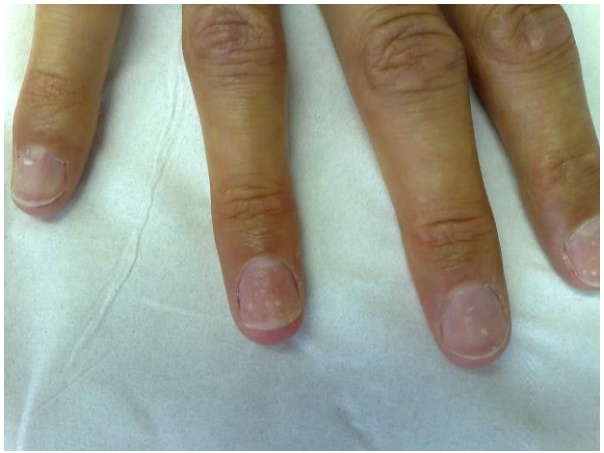
CRISTALLI 🚫

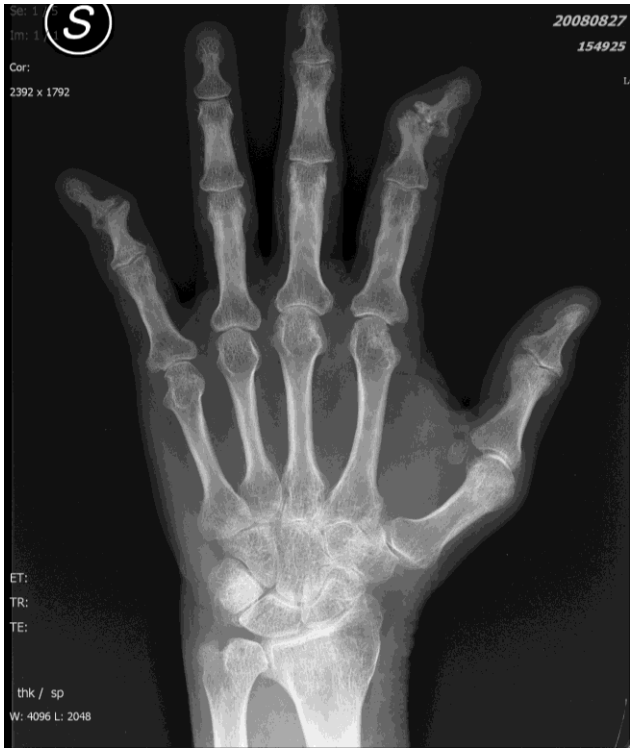
PCR 10 mg/l

Uricemia 135 mmol/l

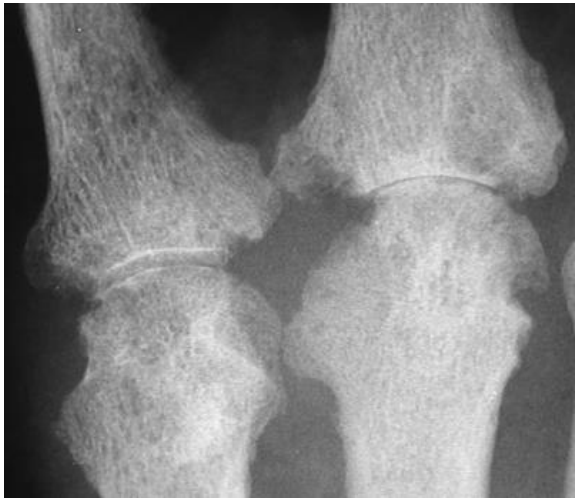
03
DIAGNOSI DIFFERENZIALE

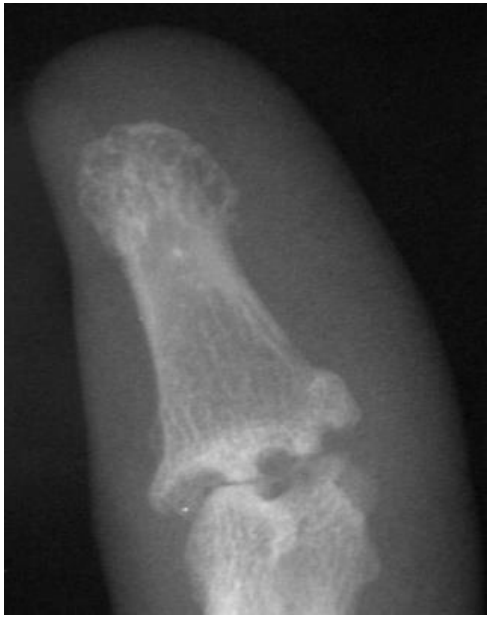
Valutazione clinico/strumentale



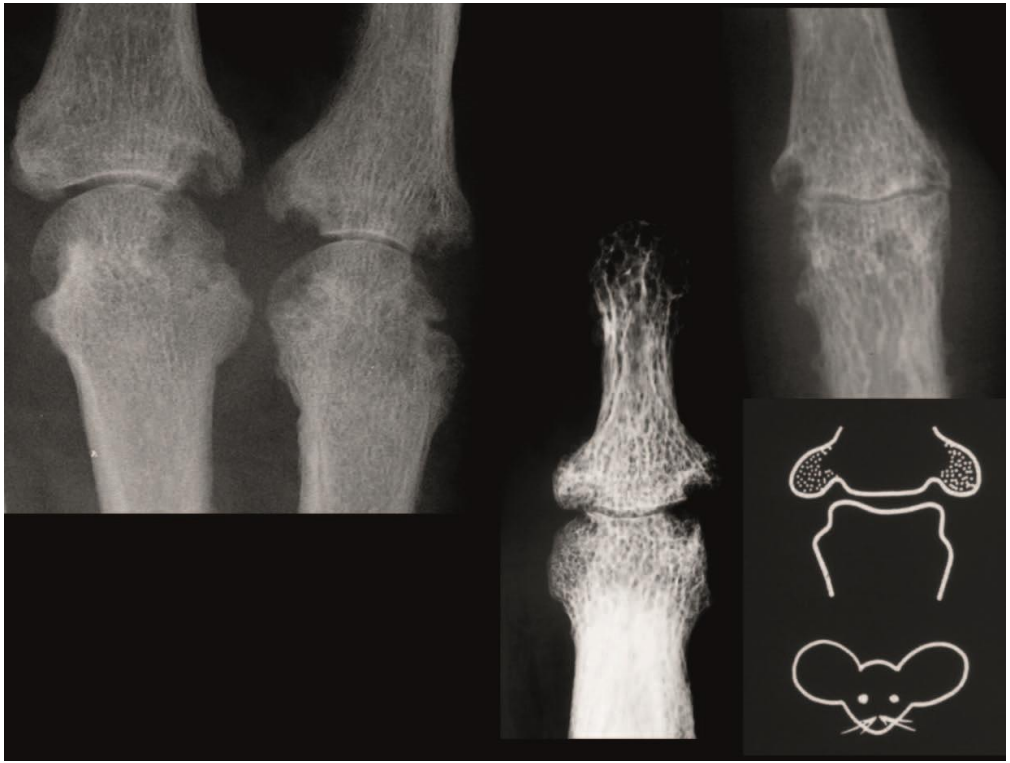


DIAGNOSI?

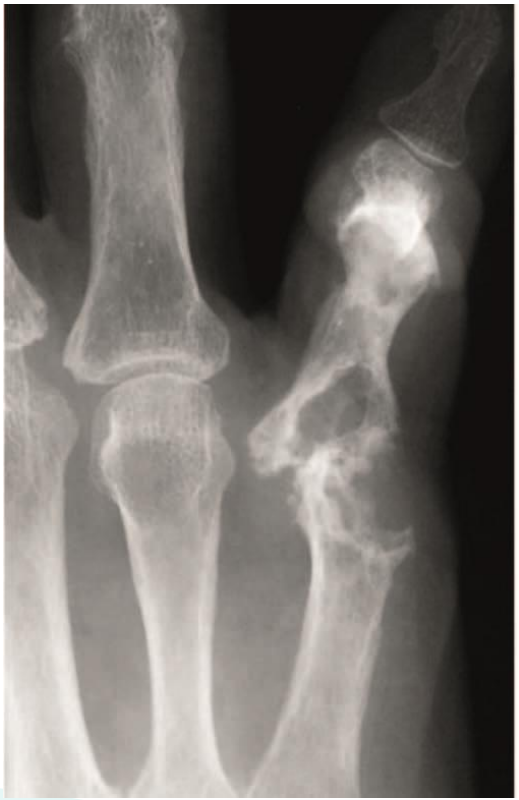


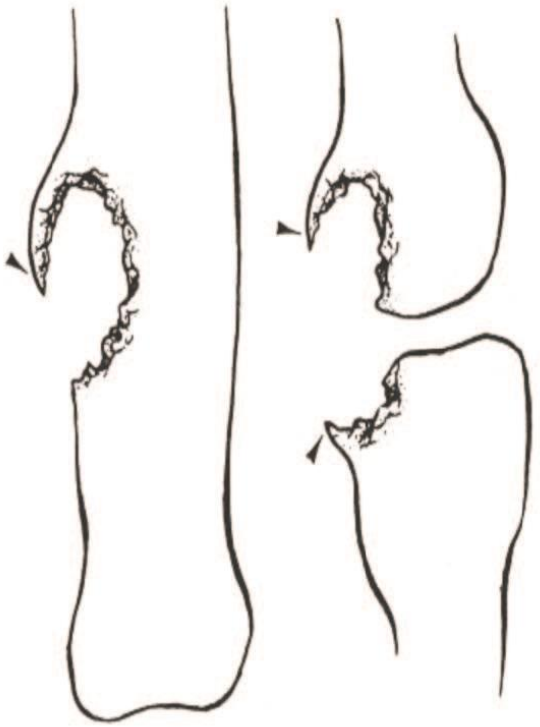


Artrite psoriatica



Stessa cosa?

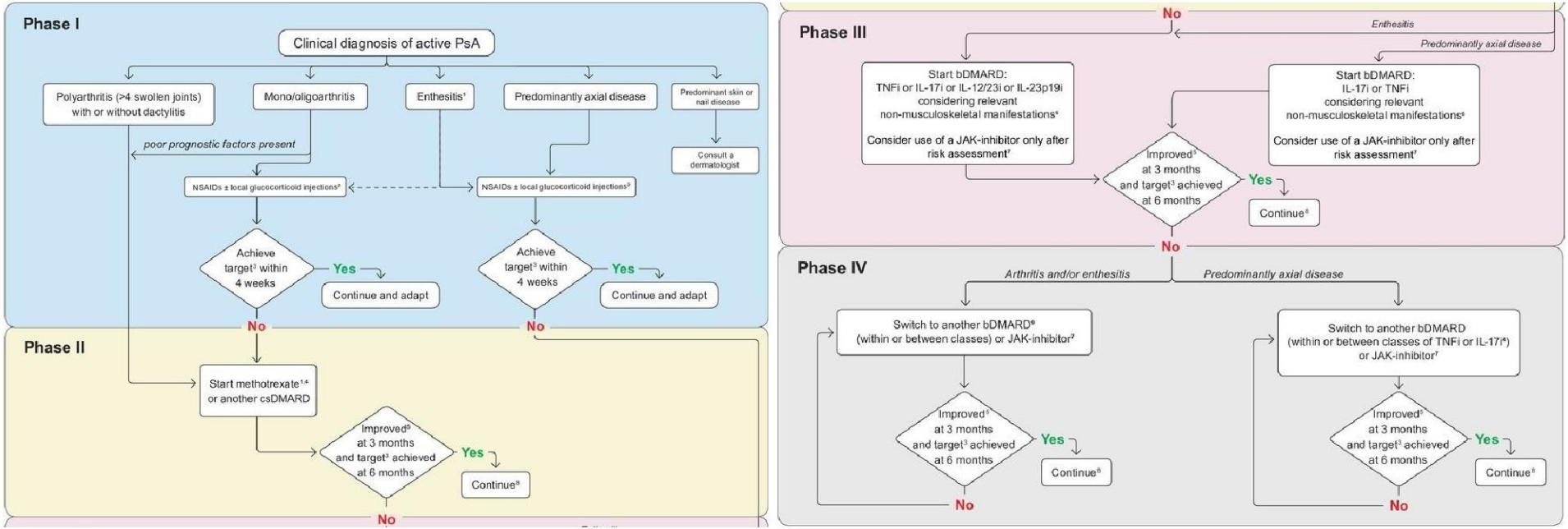




03

TERAPIA?

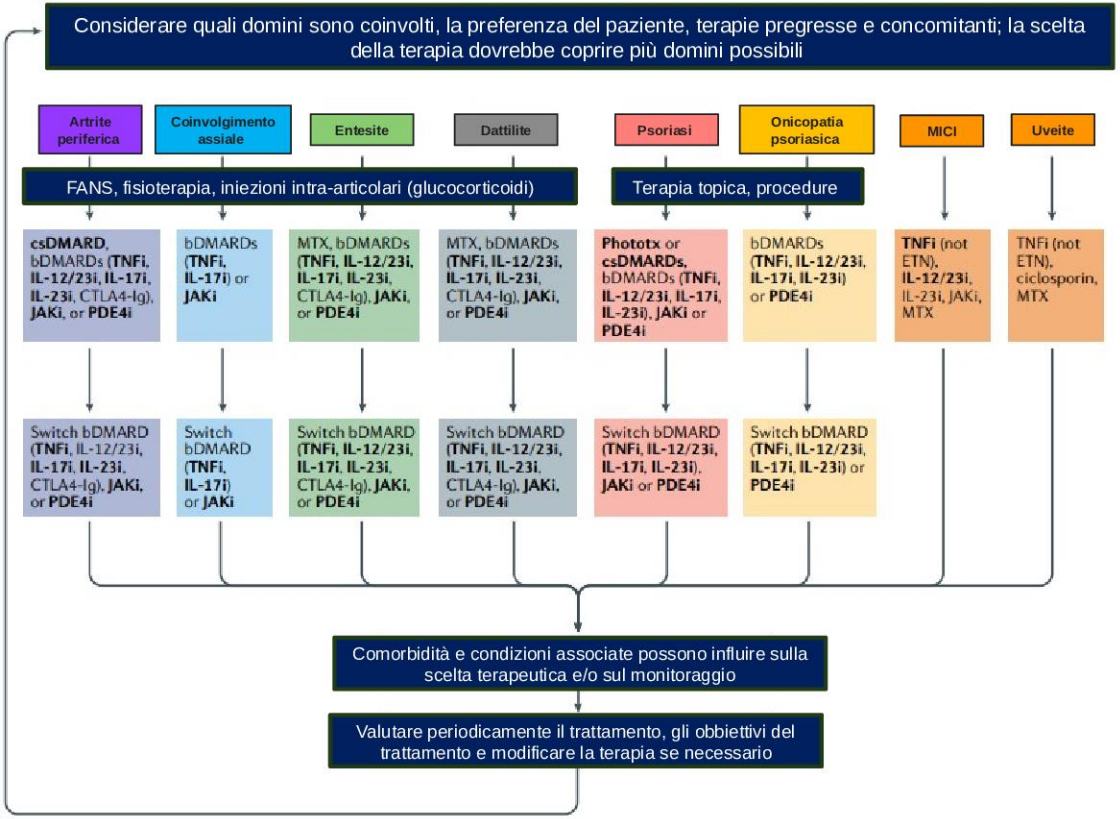
EULAR: raccomandazioni per il trattamento dell'artrite psoriasica



1. *Some studies suggest that enthesitis may respond to methotrexate, but the level of evidence is low.*
2. *No glucocorticoids for axial disease.*
3. *The target is remission or low disease activity (especially with long standing disease) in accordance with the treat-to-target recommendations.*
4. *Preferred in the presence of relevant skin involvement, however in case of concomitant inflammatory bowel disease or uveitis, a TNF monoclonal antibody or (for IBD) IL-23i or 12/23i or JAKi is recommended.*
5. *Improvement means at least 50% reduction in disease activity.*
6. *Arthritis/enthesitis: TNFi or IL-17i or IL-12/23i or IL-23p19i; Skin: IL-17i or IL-12/23i or IL-23p19i; Uveitis: anti-TNF monoclonal antibody; IBD: anti-TNF monoclonal antibody or IL-12/23i or IL-23p19i or JAKi; Consider using PDE4i in mild disease if bDMARD and JAKi is inappropriate.*
7. *For JAK-inhibitors, caution is needed for patients aged 65 years or above, current or past long-time smokers, with a history of atherosclerotic cardiovascular disease or other cardiovascular risk factors or with other malignancy risk factors; with known risk factors for venous thromboembolism.*
8. *Consider tapering in sustained remission.*
9. *Including abatacept.*

Gossec L, Kerschbaumer A, Ferreira RJO, et al. Ann Rheum Dis. 2024;83:706-719

Raccomandazioni GRAPPA sul trattamento dell'artrite psoriasica : aggiornamento del 2021

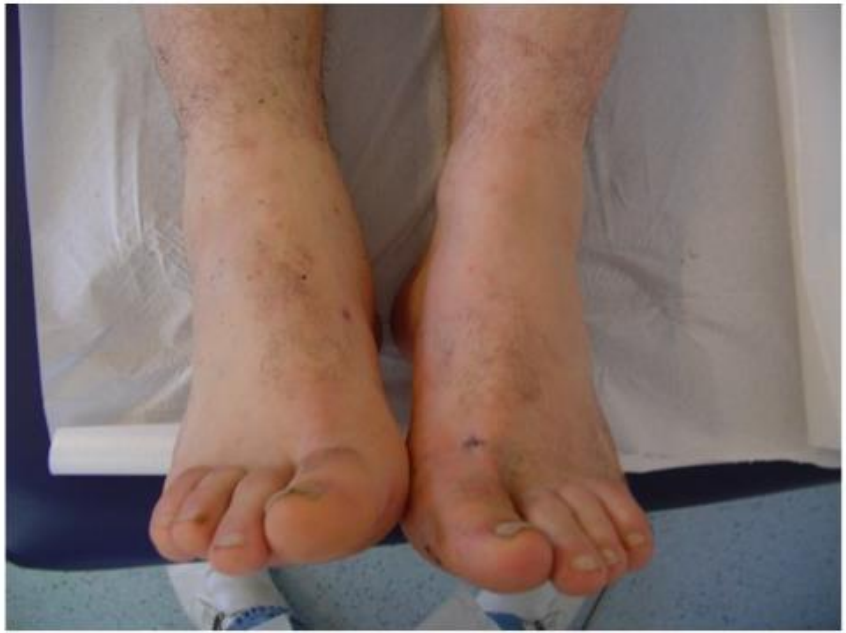


Coates LC, Soriano ER, Corp N, et al. Nat Rev Rheumatol. 2022;18:465–479.

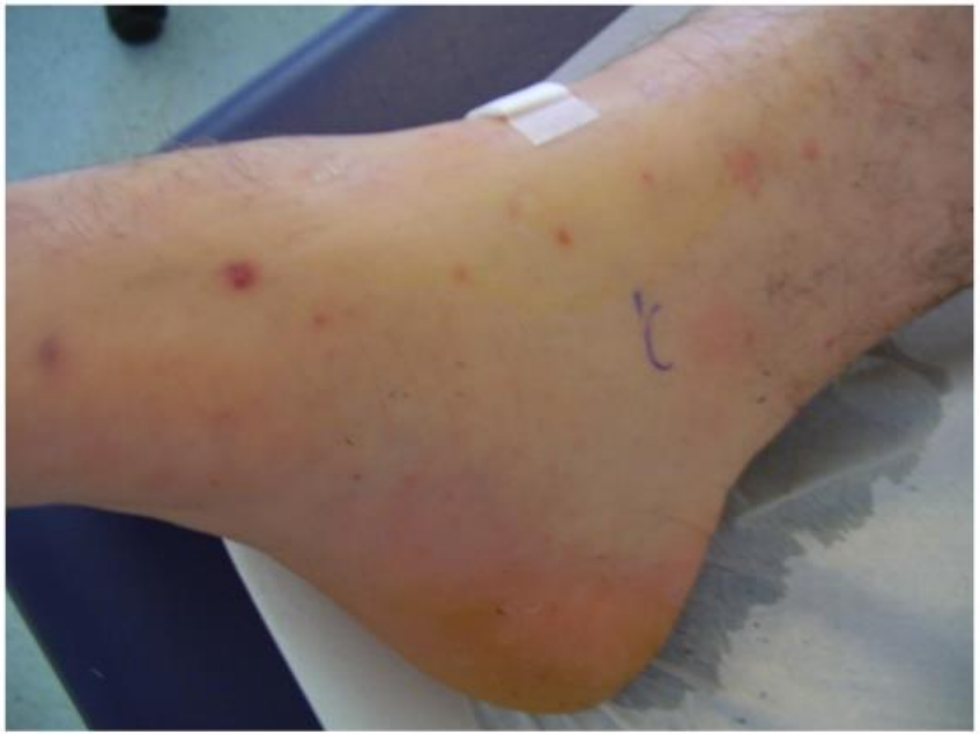
04

NODI e FEBBRE

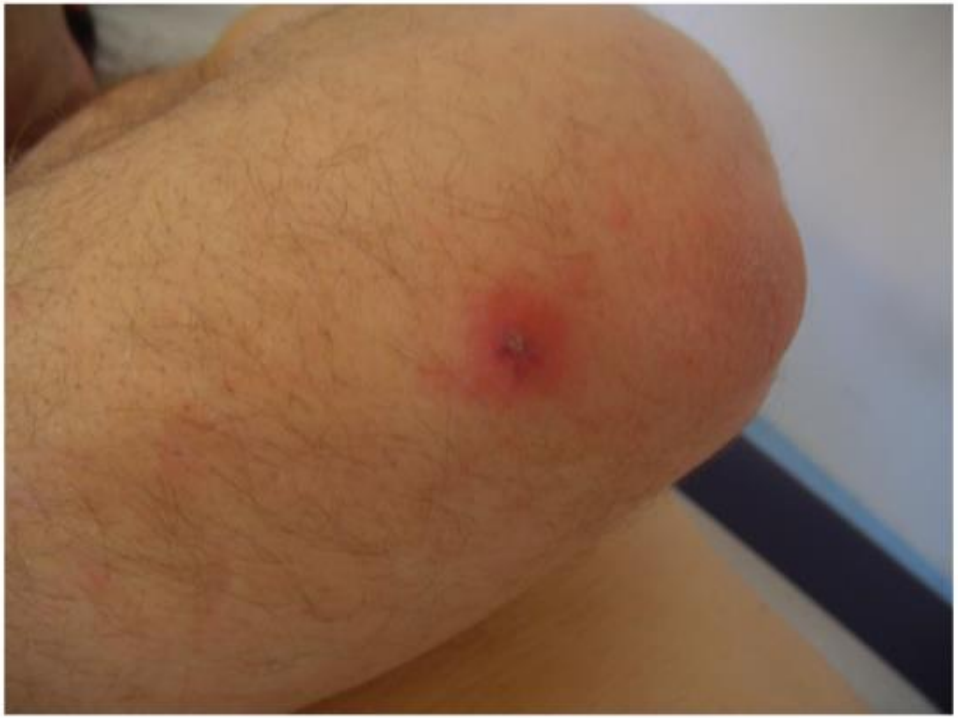
NA 25.02.1997



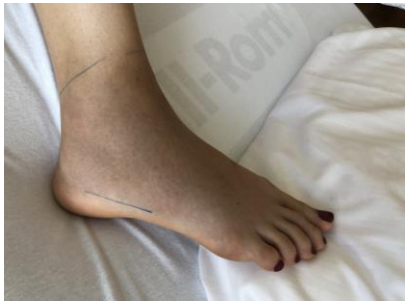
NA 25.02.1997

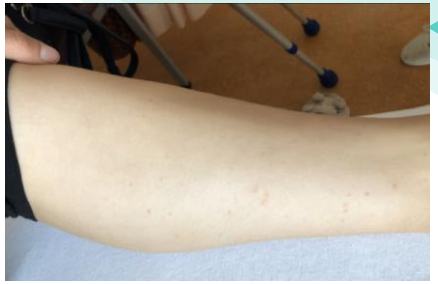


DIAGNOSI?



DIAGNOSI





LABOR

PCR 15 mg/l, VES 30 mm/h,
emocolture negative,
PCR Gonococco POSITIVA

MICROSCOPIO

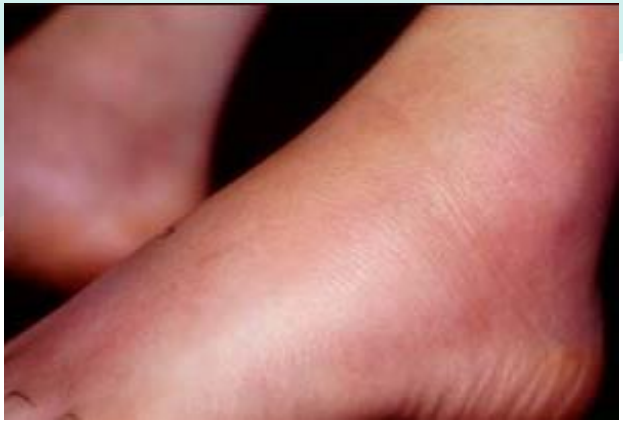
2 ml liquido sinoviale
molto torbido
Lc 12000, 80% poli
Non cristalli

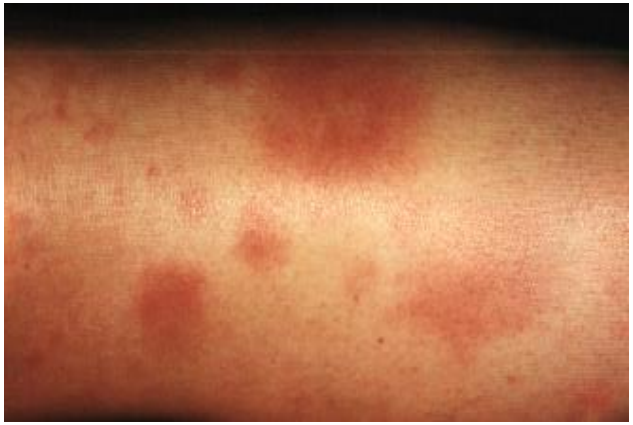
TERAPIA?

Cefalosporine
(Azitro / Doxiciclina)

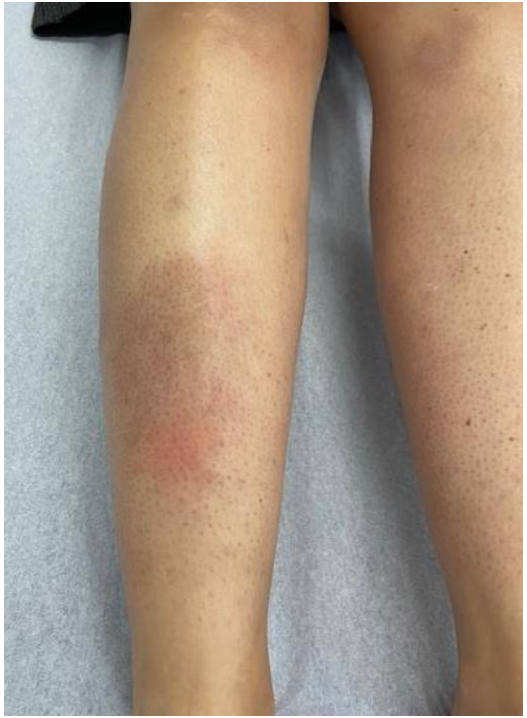
04

NODI E FEBBRE (2)



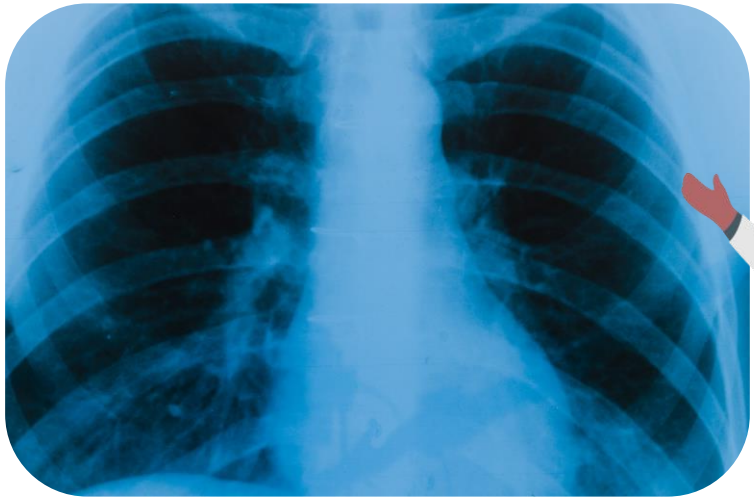


Di cosa si tratta?



RX del torace

DIAGNOSI?



TERAPIA

“DI ATTACCO”

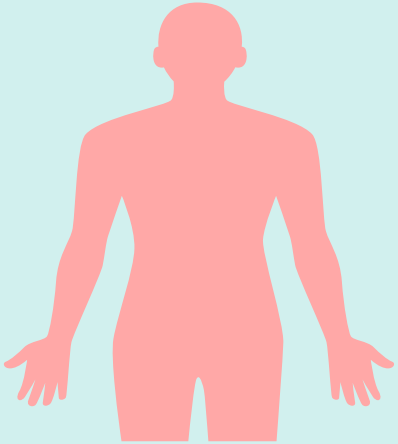
FANS
CORTICOTERAPIA

SECONDA LINEA

METHOTREXATE
ANTI TNF alfa

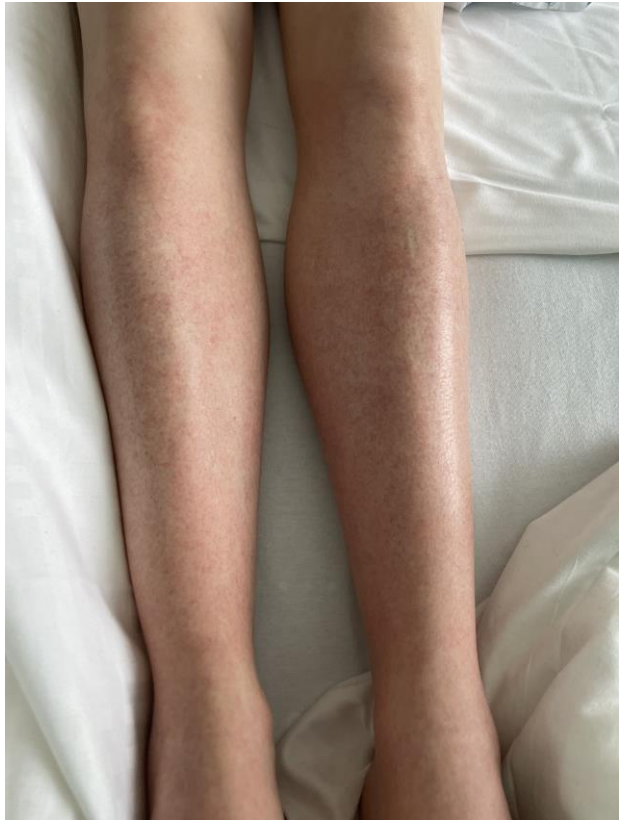
05

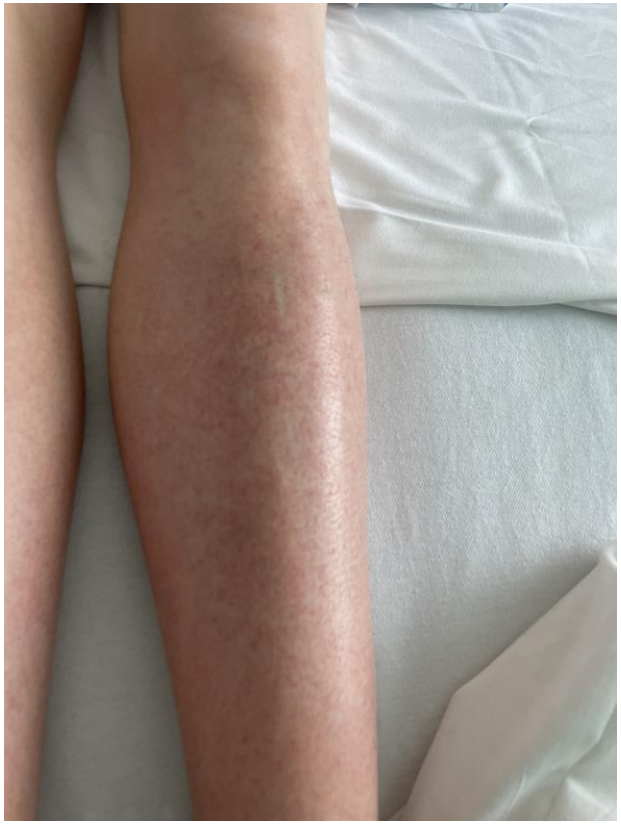
«Case of the year»



R. V. 47 anni

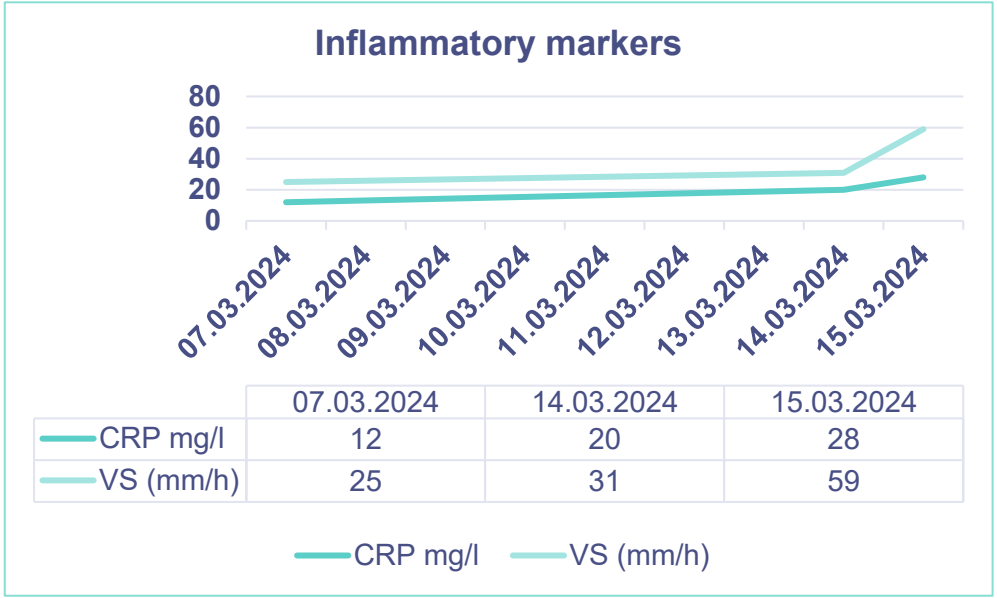
- febbre intermittente,
- dolore addominale, diarrea
- debolezza muscolare degli arti inferiori, gonfiore di diverse articolazioni
- eruzioni cutanee





→ **Biopsia cutanea**

Test di laboratorio



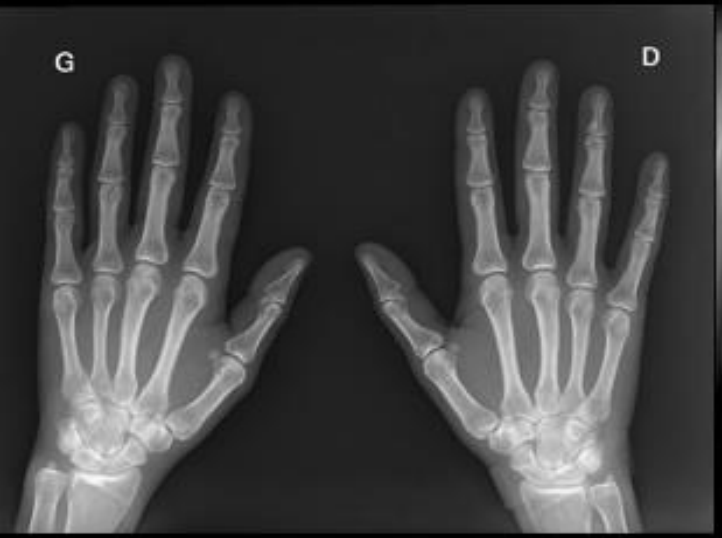
	07.03.2024	14.03.2024	15.03.2024
CRP mg/l	12	20	28
VS (mm/h)	25	31	59

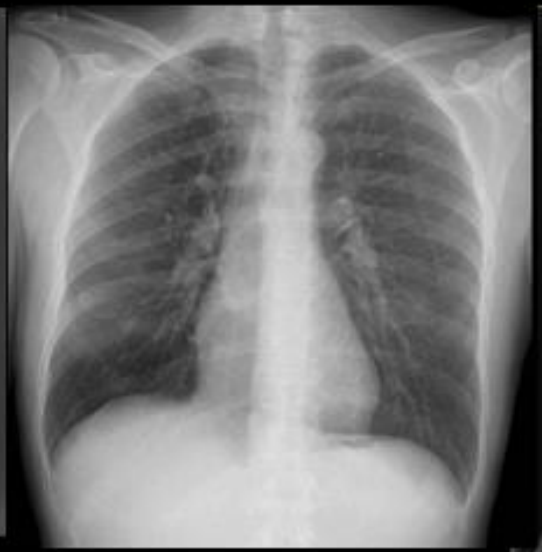
C3	C4	ANA	Anti dsDNA	ANCA	FR	ACPA
0.12	0.72	1/80	7.35	< 1	<7	5

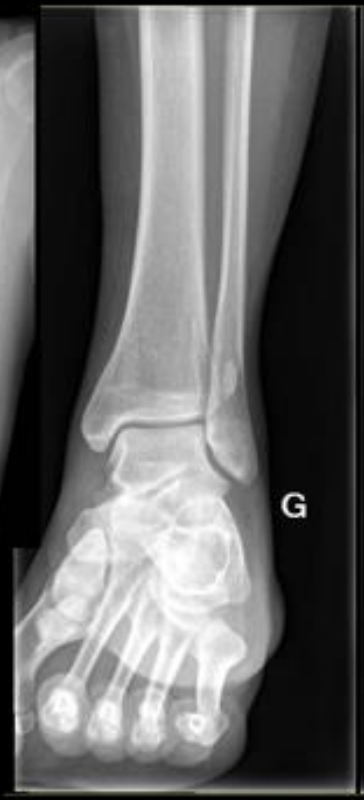
Test di laboratorio

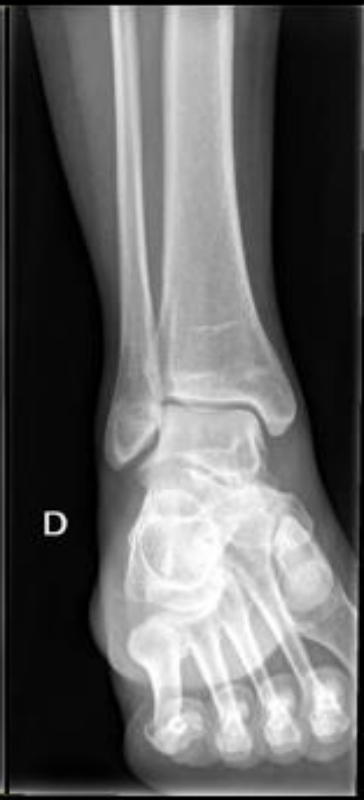
	14.03.2024	15.03.2024
Hb g/l	107	107
Lb G/L	3.1	2.8
PLT G/l	159	145
Creatinine µmol/l	64	65
Urea mmol/l	5.8	4.9
Prot./creat. urine	57	

X-ray

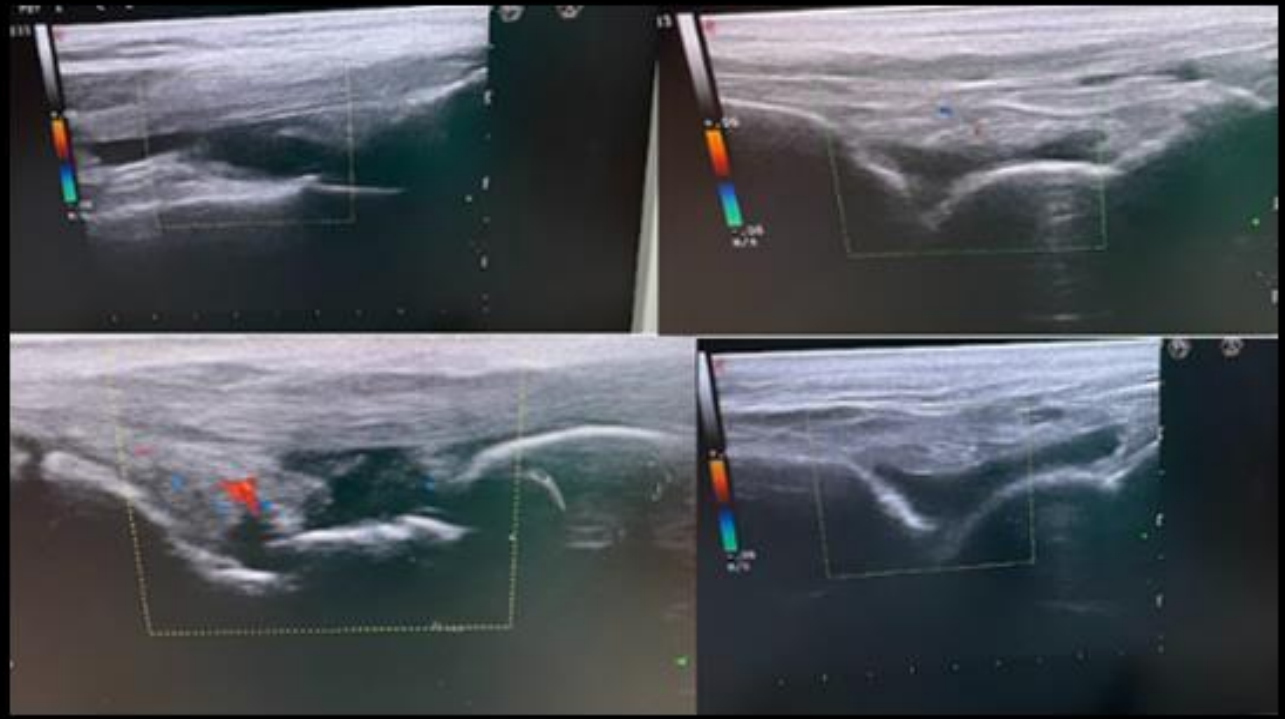




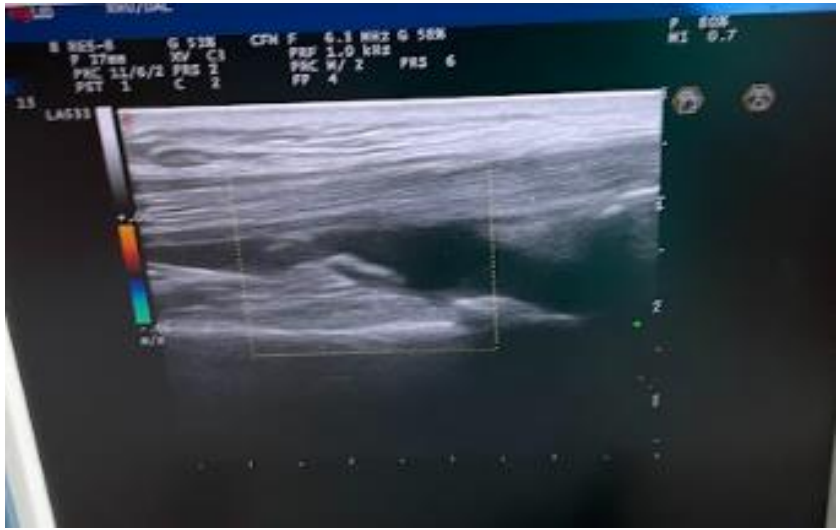




MSK ultrasound



Artrocentesi del ginocchio sin



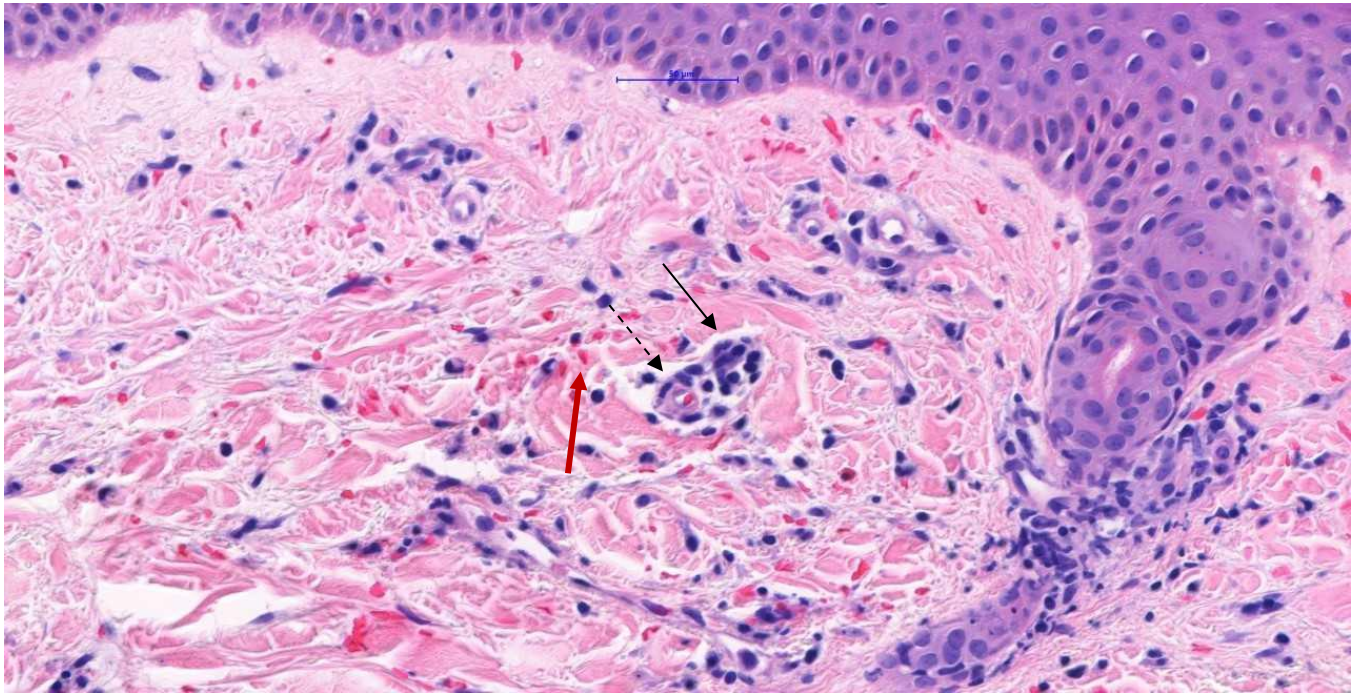
8,7 G/l

(99% cellule mononucleate)

Assenza di cristalli

Assenza di batteri

Biopsia cutanea (15.03.2024)



A special acknowledgment- photo courtesy- to dre P. Bernard et Pr Emmanuella Guenova, department of dermatology, CHUV, Lausanne

Diagnosi differenziale

- Vasculite (Henoch-Schönlein, ...)
- Connettivite (SLE, ...)
- Manifestazione Para-/post- infettiva

INFECTIOUS DISEASE WORK-UP

Parvovirus B19 viremia: 2603685 copies/ml

PCR Parvovirus B19 (synovial fluid): 255821 copies/ml

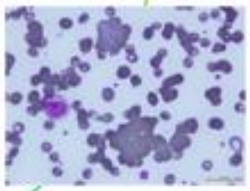
DIAGNOSI?

Gloves and socks syndrome

Manifestation

Arthritis, arthralgia

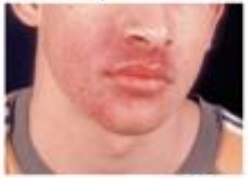
Proteinuria, GN



Anaemia

Mental status change

fetal death



gloves-and-socks pattern

Dr Marco Fedeli

STUDIO MEDICO
DR. MARCO FEDELI
BE HEALTH, BE HUMAN, BE PEOPLE

Clinica
Moncucco