

Update „Autoimmunol. Systemerkrankungen – Praxis“ – 01.07.21

# Gelenksschmerzen & Auto-immunität?

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# Disclosures

Von folgenden Pharmafirmen erhielt ich Forschungsunterstützungen, Einladungen zu Kongressen, Honorare für Beratungs- oder Vortragstätigkeiten bzw. Unterstützungen für von mir organisierte Fortbildungsveranstaltungen:

- Abbvie
- Actelion
- Astro Pharma
- AOP Orphan
- Böhlinger Ingelheim
- BMS
- Celgene
- Ebewe
- Gebro
- Lilly
- MSD
- Novartis
- Pfizer
- Roche
- Sandoz
- UCB

# Gelenksschmerzen

- Präsentation
- Häufigkeit
- Korrelat (Bildgebung)



# Fall 1 aus der Praxis



# Fall 1- 25-jährige ♀, 06/2020

## Zuweisungsgrund

- massive Arthralgien seit 2 Mon

## Anamnese

- Schultern, Ellbogen, Knie + Finger
- Raynaud-Symptomatik seit 2a
- Hautverfärbung Knie + Ellbogen
- ED Hashimoto 04/2020 (TSHb 46)

# entzündlich



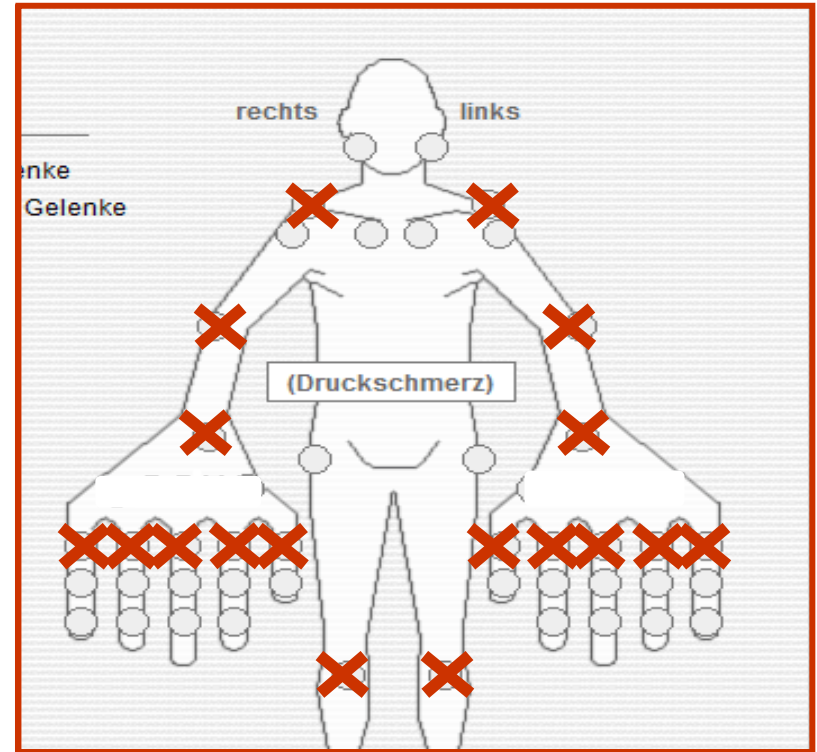
# Fall 1- 25-jährige ♀, 06/2020

## Klinik

- 18 TJ, 0 SJ

## Labor

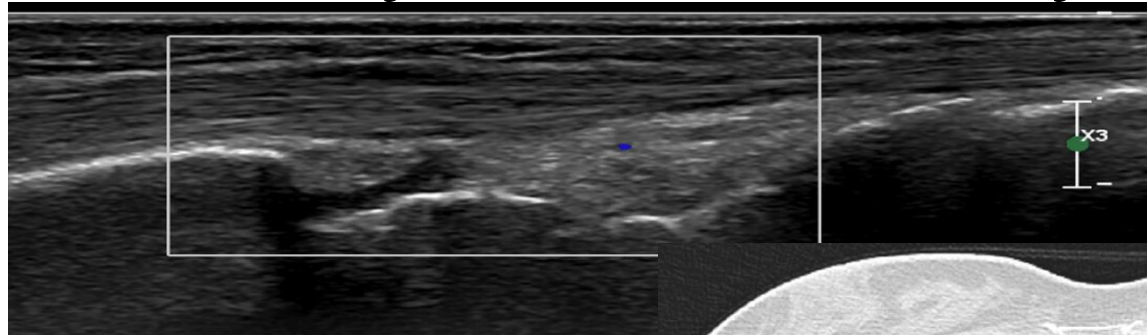
- BSG 91, CRP 1.8
- Hb 9.5, Fe/Tsf↓, Ferr↑, LDH↑↑↑
- ANAs 1:2560 (nukl. homogen), ENA-
- C3↓, Coombs+, Trop T++



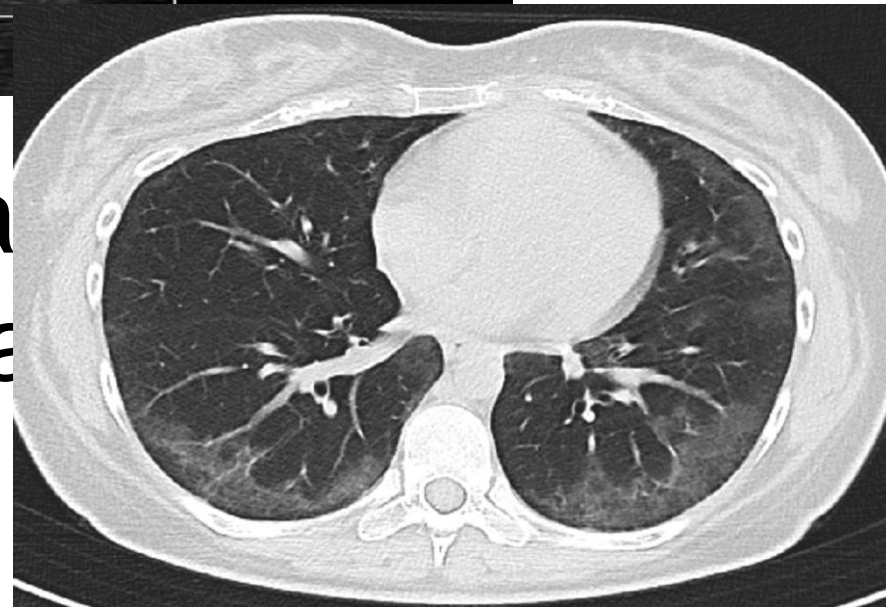
# Fall 1- 25-jährige ♀, 06/2020

## Bildgebung

- US: keine Synovitis/Tenosynovitis



- HRCT: Milchglas
- Kardio-MR: Perika

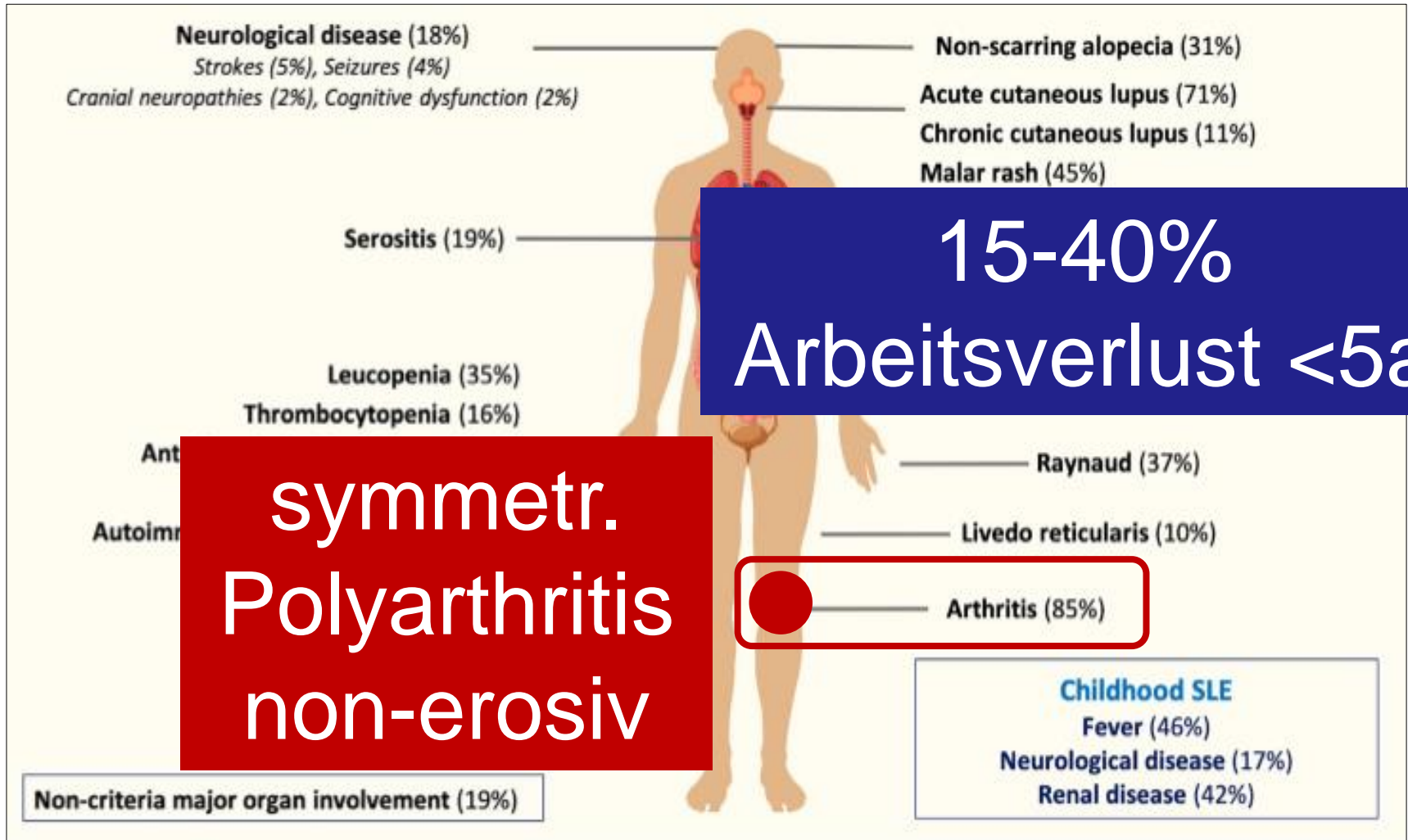




# Diagnose Fall 1

Entry criterion			
Anti-nuclear antibodies at a titre of $\geq 1:80^*$ on HEp-2 cells or an equivalent positive test <span style="float: right;">✓</span>			
<b>Additive criteria</b> Do not count a criterion if an explanation other than systemic lupus erythematosus is more likely Occurrence of a criterion on at least one occasion is sufficient At least one clinical criterion is required Criteria need not occur simultaneously Within each domain, only the highest weighted criterion is counted toward the total score			
Clinical domains and criteria	Weight	Immunological domains and criteria	Weight
<b>Constitutional</b> Fever	2	<b>Anti-phospholipid antibodies</b> Anti-cardiolipin antibodies or anti- $\beta 2$ GP1 antibodies or lupus anticoagulant	2
<b>Cutaneous</b> Non-scarring alopecia Oral ulcers Subacute cutaneous or discoid lupus Acute cutaneous lupus	2 2 4 6	<b>Complement proteins</b> Low C3 or low C4 Low C3 and low C4	3 4 <span style="float: right;">✓</span>
<b>Arthritis</b> Either synovitis characterised by swelling or effusion in $\geq$ two joints or tenderness in $\geq$ two joints plus $\geq 30$ min of morning stiffness	6 <span style="float: right;">✓</span>	<b>Highly specific antibodies</b> Anti-dsDNA antibody† Anti-Smith antibody	6 6
<b>Neurological</b> Delirium Psychosis Seizure	2 3 5		
<b>Serositis</b> Pleural or pericardial effusion Acute pericarditis	5 6		
<b>Haematological</b> Leucopenia Thrombocytopenia Autoimmune haemolysis	3 4 4		
<b>Renal</b> Proteinuria $>0.5$ g/24 h Renal biopsy class II or V lupus nephritis Renal biopsy class III or IV lupus nephritis			
<b>SLE</b>			
Classify as systemic lupus erythematosus with a score of 10 or more if entry criterion fulfilled			

# Gelenksbeteiligung SLE



# Gelenksbeteiligung SLE

Entry criterion			
Anti-nuclear antibodies at a titre of $\geq 1:80^*$ on HEp-2 cells or an equivalent positive test			
Additive criteria			
Do not count a criterion if an explanation other than systemic lupus erythematosus is more likely			
Occurrence of a criterion on at least one occasion is sufficient			
At least one clinical criterion is required			
Criteria need not occur simultaneously			
Within each domain, only the highest weighted criterion is counted toward the total score			
Clinical domains and criteria	Weight	Immunological domains and criteria	Weight
<b>Constitutional</b> Fever	2		
<b>Cutaneous</b> Non-scarring alopecia	2		
Oral ulcers	2		
Subacute cutaneous or discoid lupus	4		
Acute cutaneous lupus	5		
<b>Arthritis</b> Either synovitis characterised by swelling or effusion in $\geq$ two joints or tenderness in $\geq$ two joints plus $\geq$ 30 min of morning stiffness			
<b>Neurological</b> Delirium	2		
Psychosis	3		
Seizure	5		
<b>Serositis</b> Pleural or pericardial effusion	5		
Acute pericarditis	6		
<b>Haematological</b> Leucopenia	3		
Thrombocytopenia	4		
Autoimmune haemolysis	4		
<b>Renal</b> Proteinuria $>0.5$ g/24 h	4		
Renal biopsy class II or V lupus nephritis	8		
Renal biopsy class III or IV lupus nephritis	10		
Classify as systemic lupus erythematosus with a score of 10 or more if entry criterion fulfilled			

## Arthritis

Either synovitis characterised by swelling or effusion in  $\geq$ two joints or tenderness in  $\geq$ two joints plus  $\geq$ 30 min of morning stiffness

# Gelenksbeteiligung - Sjögren

Feature	Patients, <i>n</i> (%)
Prevalence ( <i>n</i> = 5276)	834 (16)
Female:male ratio	Not detailed
Age at diagnosis, mean, years	Not detailed
Clinical features of arthritis ( <i>n</i> = 84), <i>n</i> / <i>N</i> (%)	
Symmetrical	60/84 (71)
Monoarthritis	14/84 (17)
Number of joints involved ( <i>n</i> = 163)	
<5 joints involved	144 (88)
≥5 joints involved	19 (12)
Location of arthritis ( <i>n</i> = 152)	
Proximal IP joint	57 (35)
MCP joint	57 (35)
Wrist	49 (30)
Elbow	25 (15)
Knee	17 (10)
Ankle	16 (10)
Shoulder	9 (6)

SLR, *n*=27  
53% entzündl. Arthralgien

# Fall 2 aus der Praxis



# Fall 2- 60-jährige ♀, 11/2020

## Zuweisungsgrund

- red. AZ, KH-Gefühl, Fatigue seit ~6m

## Anamnese

- Hände + Kniegelenke
- Belastungsdyspnoe + tr. Husten
- Raynaud-Symptomatik (Dig III)

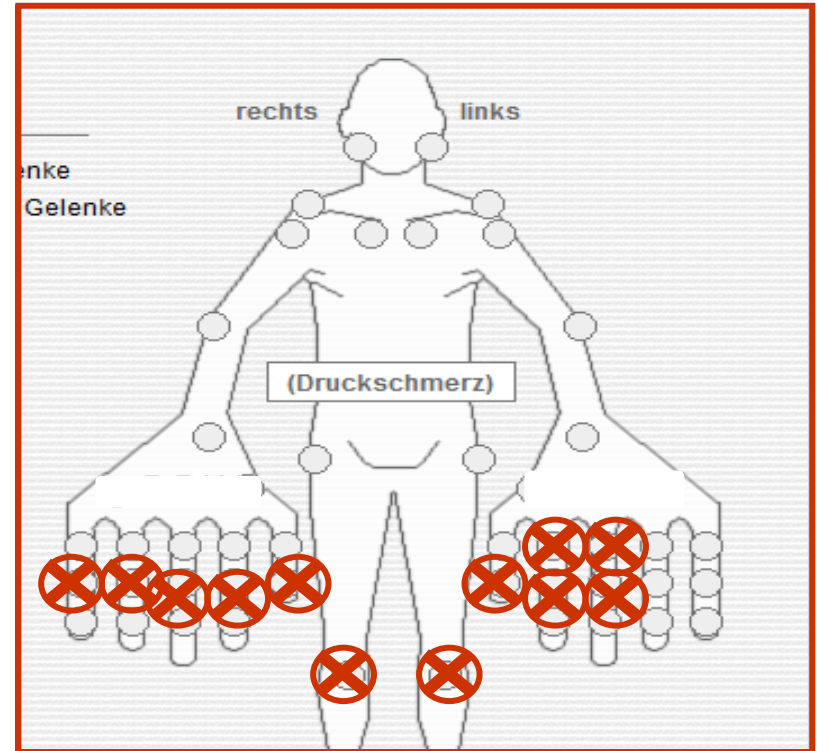
# Fall 2- 60-jährige ♀, 11/2020

## Klinik

- 12 TJ, 12 SJ
- „Puffy fingers“

## Labor

- BSG, CRP normal
- ANAs 1:2560 (Muster Topol), anti-SCL-70++++
- Trop T+, Trop I, NTproBNP, HS



# Fall 2- 60-jährige ♀, 06/2020

## Bildgebung

- US: Erguss RC, Capsulitis



- HRCT-Lunge: Milchglas (NSIP), NB: dilatierter Ösophagus
- Megacolon, systemische Sklerose, Arthritis



# Gelenke - syst. Sklerose

## MSK hand complications in patients with SSc

Articular	Arthralgia Inflammatory arthritis Osteoarthritis/degeneration Psoriatic arthritis-like Erosion
Tendon	Tenosynovitis Tendon friction rub Tendon Rupture
Bone	Acro-osteolysis Osteomyelitis
Soft Tissue	Calcinosis

40-100% entzündl. Arthralgien

**Befall der Hände!**

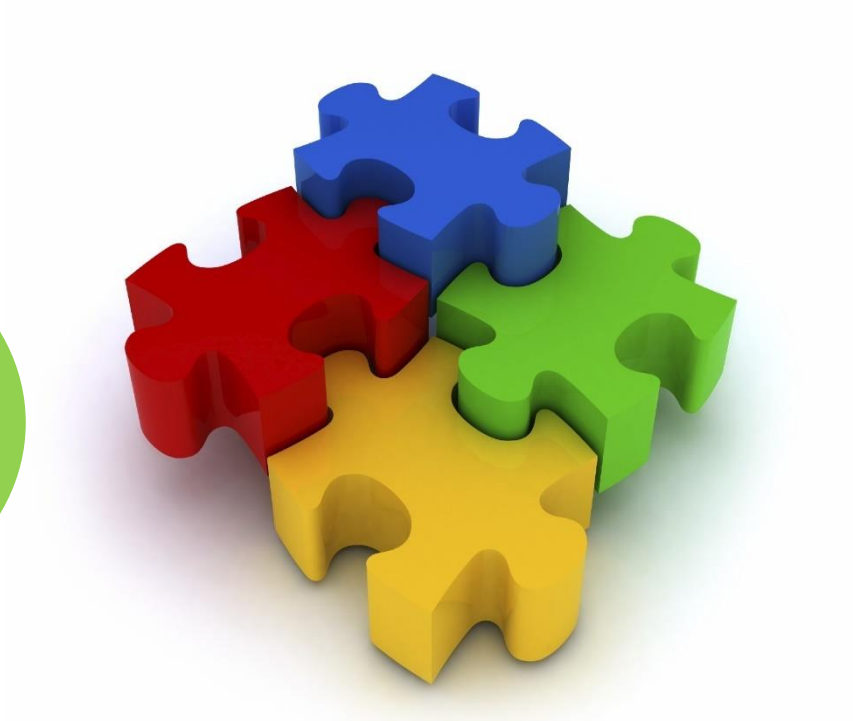
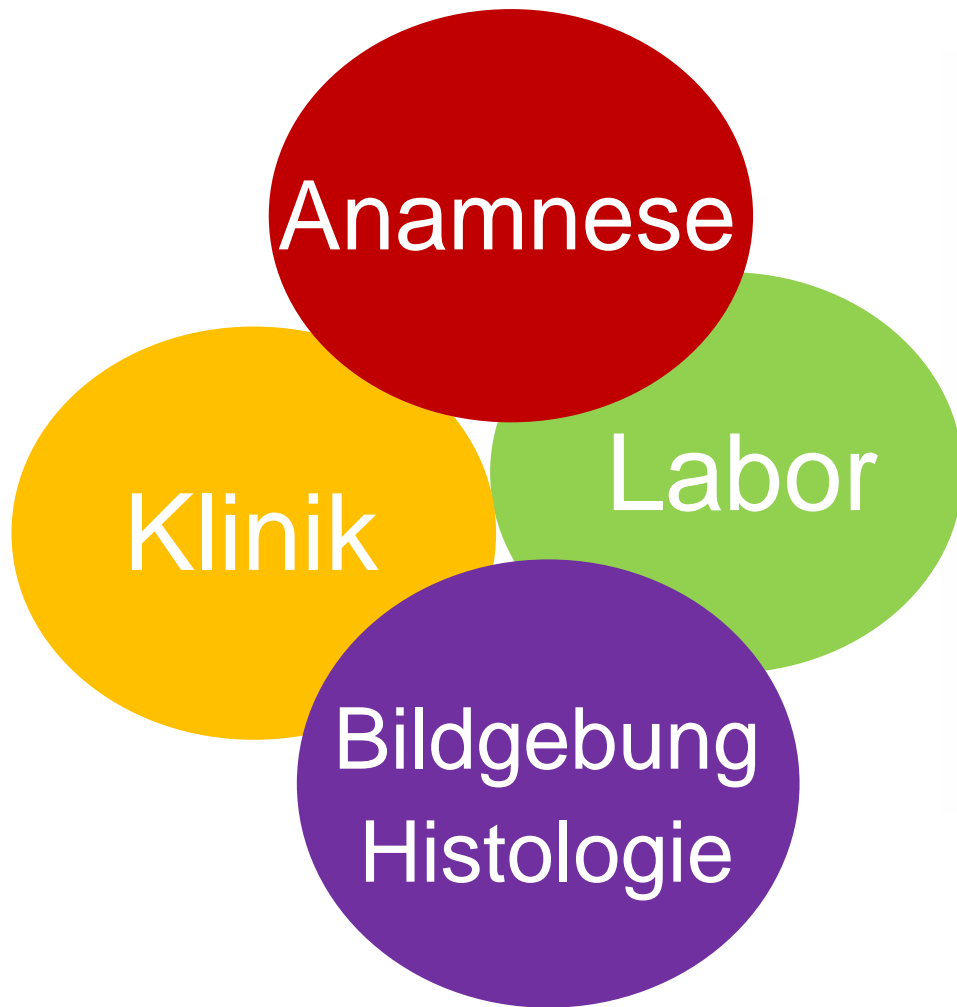
# Gelenke- syst. Sklerose

	Frequency of joint pain, %	Frequency of synovitis (tender and swollen joints), %	Frequency of tendon involvement, %
<b>Clinical evaluation</b>			
Clements <i>et al.</i> [15] (n = 134 dcSSc)	ND	54 (39)	48 (36)
Ostojic <i>et al.</i> [13] (n = 105)			16 (15)
Malcarne <i>et al.</i> [16] (n = 114)			ND
Ostojic <i>et al.</i> [14] (n = 60)			9 (15)
Avouac <i>et al.</i> [10] (n = 7286)			802 (11)
<b>Ultrasounds</b>			
Cuomo <i>et al.</i> [43]			ND
<b>MRI</b>			
Allanore <i>et al.</i> [46] (n = 38)			4 (10.5)
Low <i>et al.</i> [44] (n = 17)			8 (47)

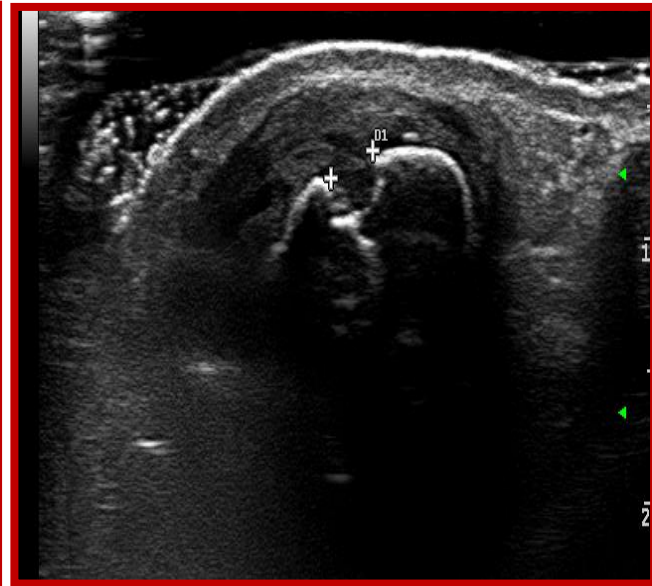
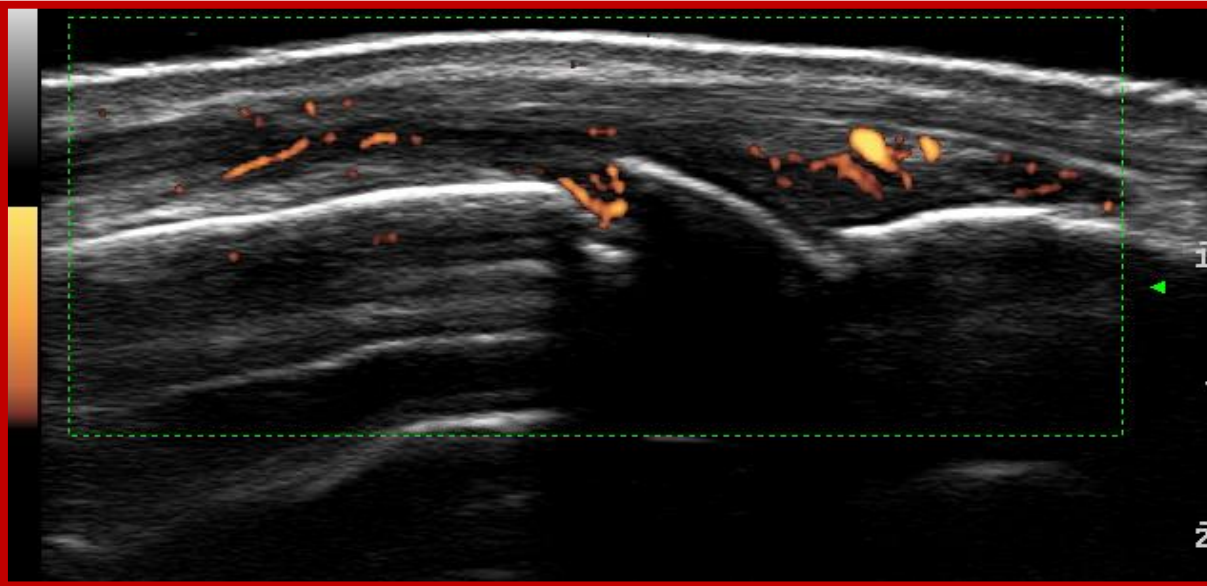


„Puffy fingers“ - Tenosynovitis

# entzündliche Arthralgien – DD?



# entzündl. vs. nicht-entzündl.?



Ultraschall der Gelenke - bedside

# Take home messages

- Gelenksbeteiligung häufig!
- entzündl. Arthralgien/Arthritis
- Burden of Disease

# Danke f. Ihre Aufmerksamkeit!



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Foto: J. Gruber

