



MANIFESTAZIONI EXTRAINTESTINALI DELLE MALATTIE  
INFIAMMATORIE CRONICHE INTESTINALI

DISTRETTO MUSCOLO-SCHELETRICO

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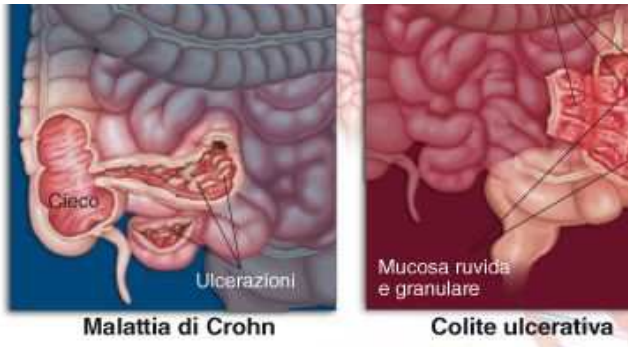
ECCO Guideline/Consensus Paper

**The First European Evidence-based Consensus  
on Extra-intestinal Manifestations in  
Inflammatory Bowel Disease**

*Journal of Crohn's and Colitis*  
2016, 239–254

**Up to 50% of patients with IBD: at least one extra-intestinal manifestation [EIM]**

**Multidisciplinary team meeting**



## Osteo-Articular involvement

17%- 62% of IBD patients

### Spondyloarthritis

Axial arthritis  
(1%-45.7%)

- Spondylitis
- Sacroiliitis

Peripheral arthritis  
(2.8%-30.6%)

Enthesitis

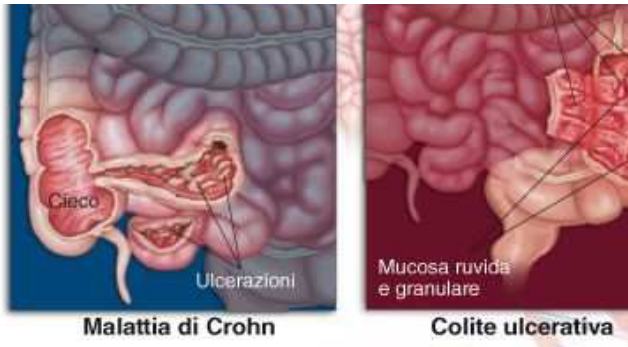
Dactylitis

Tenosynovitis

7%-50%



*Scarpa R et al. J Rheumatol 1992; 19: 373-377; Protzer U et al. 1996; 91:330-335; Veloso FT et al. J Clin Gastroenterol 1996; 23: 29-34; de Vlam K et al. J Rheumatol 2000; 27: 2860-2865; Queiro R et al. Clin Rheumatol 2000; 19: 445-449; Palm Ø et al. Rheumatology (Oxford) 2001; 40: 1256-1261*



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### Spondyloarthritis

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Enthesitis

Dactylitis

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Tenosynovitis

Arthralgias

Osteoporosis

Osteomalacia

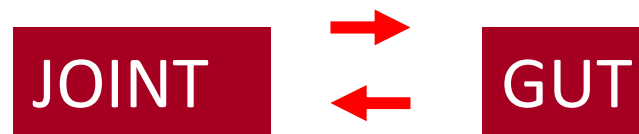
Iatrogenic Bone and Joint complications

- osteonecrosis related to corticosteroids
- infliximab-related lupus-like syndrome

*Scarpa R et al. J Rheumatol 1992; 19: 373-377; Protzer U et al. 1996; 91:330-335; Veloso FT et al. J Clin Gastroenterol 1996; 23: 29-34; de Vlam K et al. J Rheumatol 2000; 27: 2860-2865; Queiro R et al. Clin Rheumatol 2000; 19: 445-449; Palm Ø et al. Rheumatology (Oxford) 2001; 40: 1256-1261*

- **Subclinical gut inflammation** has been documented by ileocolonoscopy in up to **two-thirds** of patients with spondyloarthropathies
- **6.5% of patients with spondyloarthropathies developed IBD after 2–9 years of follow-up**

- **reactive arthritis**
- *Yersinia enterocolitica*
- *Salmonella typhimurium*
- *S. Enteritidis*
- *Shigella flexnerii*
- *Campylobacter jejuni*



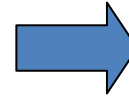
Whipple's disease

intestinal by-pass surgery  
(i.e. obesity)

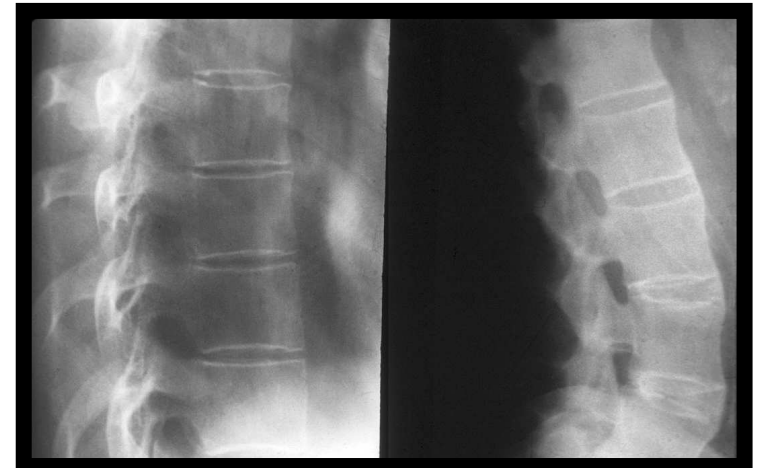
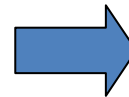
Celiac disease

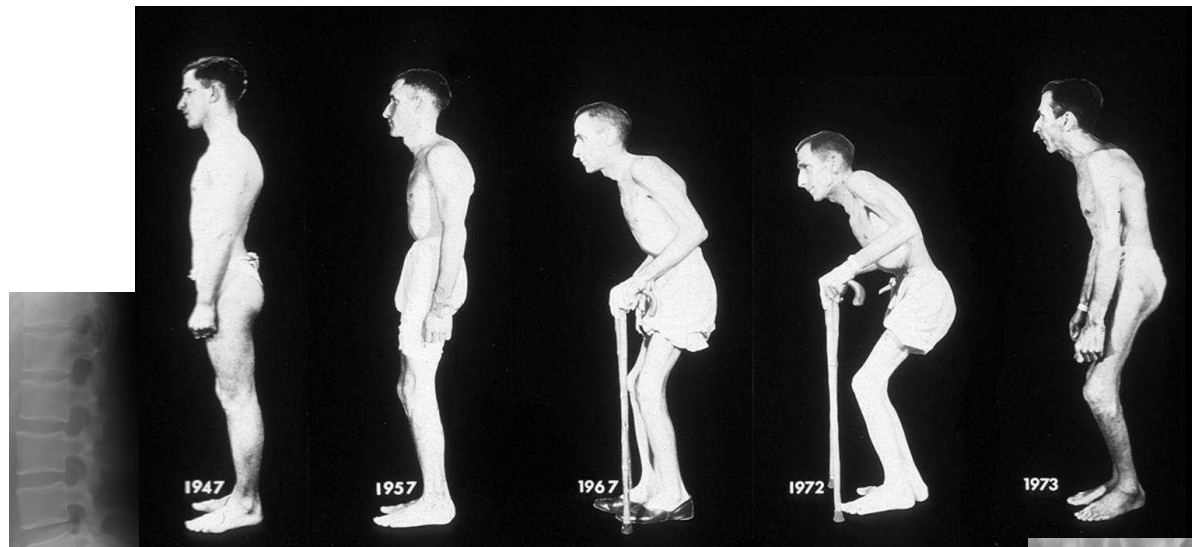
## Axial arthritis

- Sacroiliitis



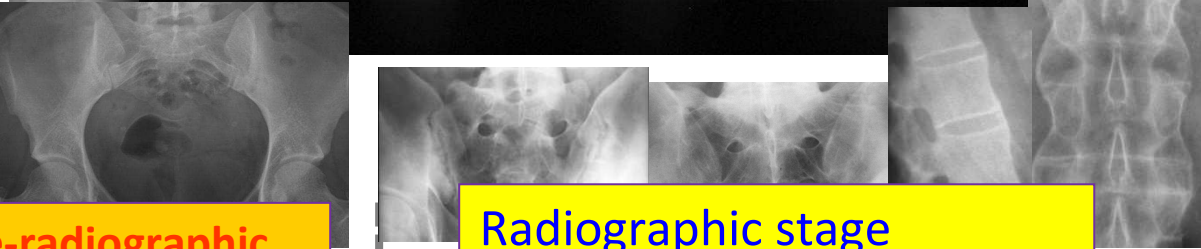
- Spondylitis





Early diagnosis

*a challenge*



Pre-radiographic stage

Radiographic stage (Ankylosing spondylitis)



From Rudwaleit et al. Arthritis Rheum 2005, modified

Early diagnosis

•Clinical arm



Inflammatory Back Pain

•Imaging arm



MRI



Pre-radiographic stage

Radiographic stage  
(Ankylosing spondylitis)

Assessment in Spondyloarthritis International Society [ASAS] classification of 2009

Ann Rheum Dis 2009 Jun; 68(6):784-8

## Inflammatory Back Pain

ottima risposta  
ai FANS

Esordio  
insidioso

Età di esordio  
<40 aa

Dolore gluteo  
alternante

### Red Flags

Miglioramento  
con l'esercizio

Sciatica mozza

Dolore notturno  
(migliora alzandosi e  
muovendosi)

Nessun miglioramento  
con il riposo

**4 o più di questi**

## MRI

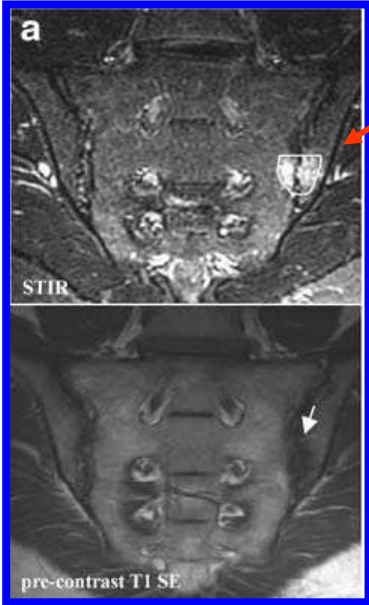
- the milestone in diagnostic imaging of the preradiographic phase of AS
- active (“acute”) inflammation in the sacroiliac joints and/or spine before X-Ray

- *Ahlstrom H et al. Arthritis Rheum 1990*
- *Braun J et al. Arthritis Rheum 1994*
- *Ahlstrom H et al. Arthritis Rheum 1990*
- *Braun J et al. Arthritis Rheum 1994*
- *Oostveen J et al. J Rheumatol 1999*

MRI features:  
sacroiliitis

MRI features:  
Spinal column

STIR



T1-SE



STIR



-Subchondral bone marrow edema

Early disease

highly predictive of radiographic appearances of sacroiliitis

Muche B et al. *Arthritis Rheum* 2003  
Bennett AN et al. *Arthritis Rheum* 2008

## Peripheral arthritis

prevalence

>Crohn

>Females

generally non-erosive

**Articular symptoms might precede intestinal complaints by several years (2-9 years)**

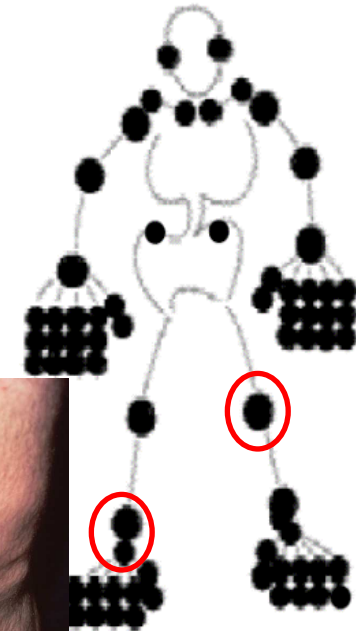
2 different types

- Type I: pauciarticular
- Type II: polyarticular

## Peripheral arthritis

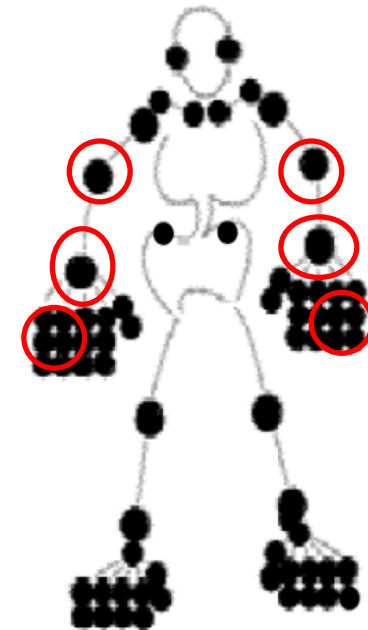
### Type 1 (pauciarticular)

- <5 joints affected
- large weight-bearing joints of the lower limb
- Asymmetrical
- Acute self-limiting attacks (<10 weeks)
- No permanent joint damage
- Often coincides with relapses of IBD
- Strongly associated with extraintestinal manifestations of IBD (uveitis, erythema nodosum)



### Type 2 (polyarticular)

- $\geq 5$  joints affected
- Symmetrical distribution
- Predominantly affects the upper limbs
- Symptoms generally persist for months to years
- Independent of IBD activity





US –Power-doppler



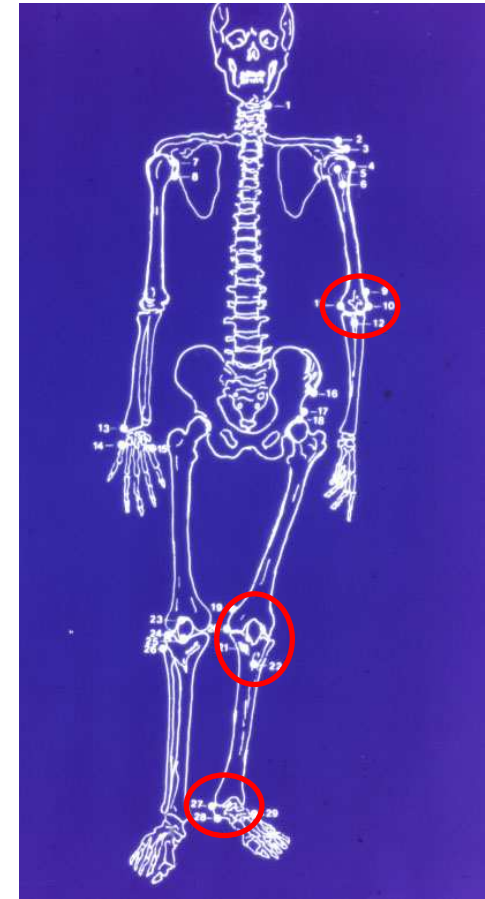
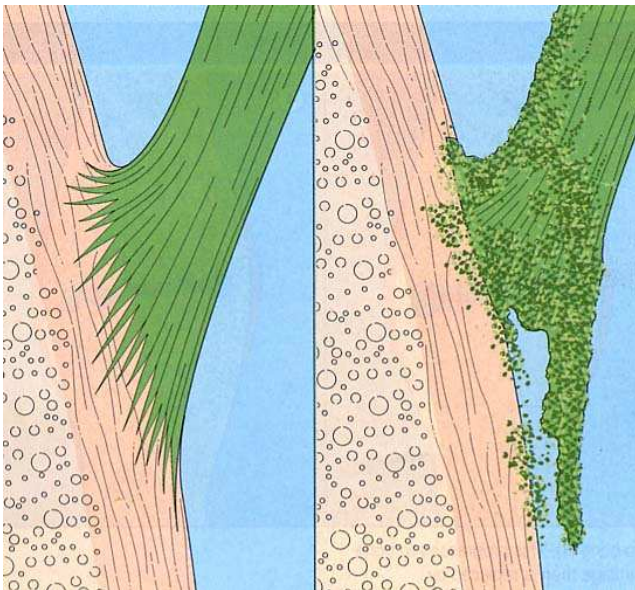
## Enthesitis

inflammation of insertions  
on the bone of:

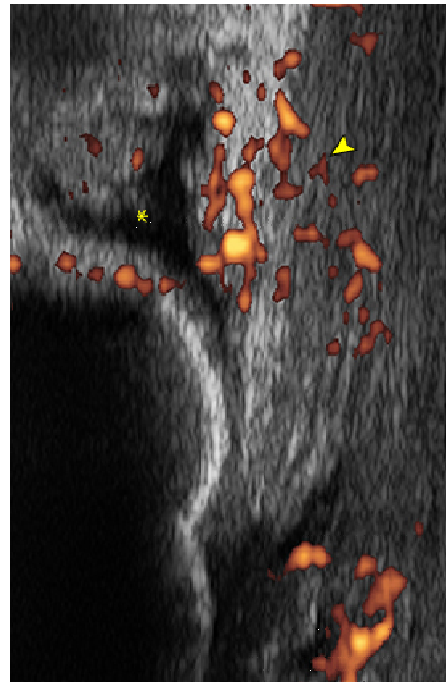
- -Tendons
- -ligaments
- -fascia
- -articular capsule

Erosion

Bone proliferation

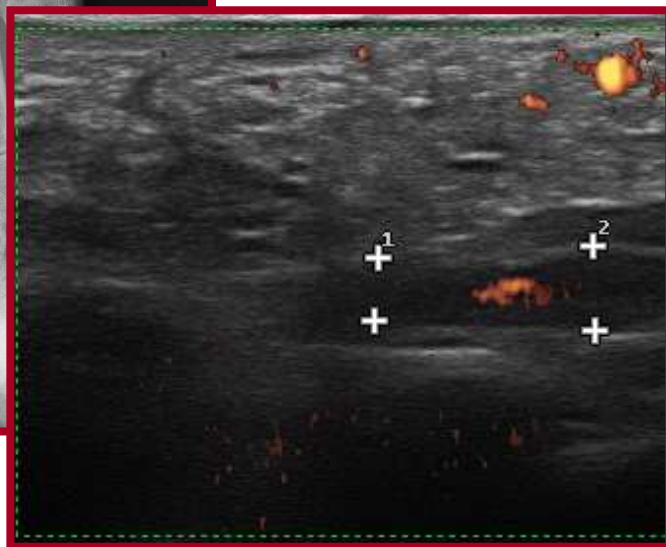
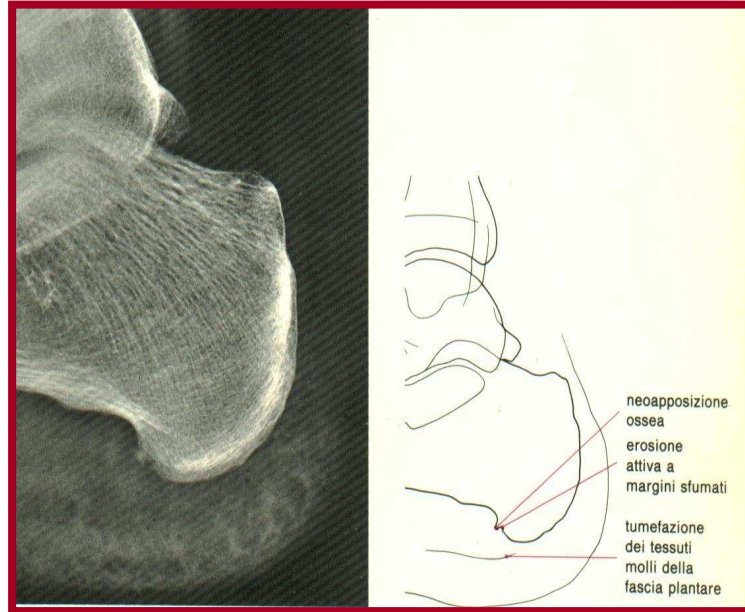


- Pain
- Tenderness
- Swelling



• **Achille's Enthesitis**

# Plantar fascia Enthesitis



## Dactylitis



## Tenosynovitis



### Edema improntabile mani/piedi

Sintomo d'esordio nell'20% dei  
casi di artrite psoriasica *Cantini et al,*  
*Clin Exp Rheumatol 2001*

# Need for integrated approach for IBD-associated SpA patient management

## Diagnostic clues for the rheumatologist (A)

- Family history of IBD
- Clinical symptoms:
  - Chronic diarrhea
  - Chronic abdominal pain
  - Rectal bleeding
  - Weight loss
  - Persistent fever
- History or evidence of perianal fistula/abscess
- Anemia

## Diagnostic clues for the gastroenterologist (B)

- Chronic back pain (>3 months)
- Peripheral joint pain/swelling
- Presence of signs of enthesitis (inflammation of the sites where tendons, capsules and ligaments attach to bone)
- History or evidence of dactylitis (“sausage” digit)

# Treatment

## Assiali

- Spondilite
  - Sacroileite
- Intensive physiotherapy
  - Short term NSAIDs
  - Anti-TNF (intolerant/refractory to NSAIDs)
- Sulfasalazine
  - methotrexate

limited efficacy

## Periferiche

- Artrite
  - Entesite
  - Tenosinovite
  - Dattilite
- Treatment of underlying gut inflammation
  - short-term NSAIDs
  - local steroid injection
  - Short-term oral corticosteroids
- Sulfasalazine
  - methotrexate
- anti-TNF

# Concerns about NSAIDs and Coxibs

- May induce intestinal ulcerations
- Can activate IBD (in particular UC).
- may cause the so-called “NSAIDs enteropathy”

Bjarnason I et al. Gastroenterology 1993

Rampton DS, Sladen GE. Postgrad Med J 1981

Riley SA et al. Gut 1990

Biancone L et al. Aliment Pharmacol Ther 2004

The final recommendation for the use of NSAIDs in the treatment of articular manifestations of IBD is

**“avoid them if possible”**

**A short-term course (no more than 2 weeks) of selective COXIBs may be acceptable in quiescent IBD patients**

Olivieri I et al. Autoimmunity Rev 2014



Grazie

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