

Recommendation 1: Defining & Diagnosing UPIA

Learning Objectives



At the end of this section participants should be able to:

- **State the definition of Undifferentiated Peripheral Inflammatory Arthritis (UPIA)**
- **Describe the process of arriving at a diagnosis of UPIA**
- **Explain that UPIA is a diagnosis of exclusion that is subject to change over time**

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Recommendation 1

All possible causes of arthritis (*idiopathic, autoimmune, degenerative, infectious, malignancy, traumatic, metabolic*) should be considered in the differential diagnosis.

Complete history and thorough physical examination will determine the ranking order of possible differential diagnoses [5, D].

Investigations should be based on the differential diagnosis of the patient.

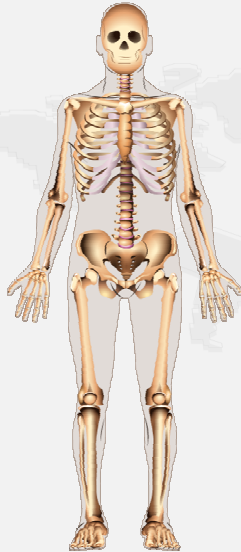
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This recommendation had a strong agreement of 9.0/10.

97% of rheumatologists felt that this recommendation was already implemented in their practice.

Undifferentiated Arthritis



Undifferentiated Arthritis

- Early stage of classifiable disease
- Part of an overlap of disease
- Partial form of a defined disease
- Disease of unknown origin

UA envelops a heterogeneous group of recent onset arthritides that are not classifiable within established criteria sets such as those of the American College of Rheumatology (ACR) and The European League Against Rheumatism (EULAR).

UA may represent an early stage of a classified form of arthritis that will eventually be definable; an overlap of more than one disease; a partial form of a defined disease; or a disease of unknown origin. UA overall has a better prognosis than RA as it encompasses a spectrum of self-limited disorders. As compared to RA, a patient with UA usually presents with fewer affected joints, less radiographic erosions, better functional ability, and a greater likelihood of being seronegative. Patients with UA are also less likely than patients with RA to require treatment that involves the use of corticosteroids (such as Prednisone) or DMARDs and a substantial proportion of UA patients remit spontaneously.

Hitchon CA, Peschken CA, Shaikh S, El-Gabalawy HS. Early undifferentiated arthritis. *Rheum Dis Clin N Am*. 2005;31:605-626.

UPIA as Defined by 3e



- **Clinically apparent joint swelling is observed**

AND

- **Diagnostic/classification criteria for any rheumatologic disorder are not fulfilled after the initial visits and diagnostic investigations**

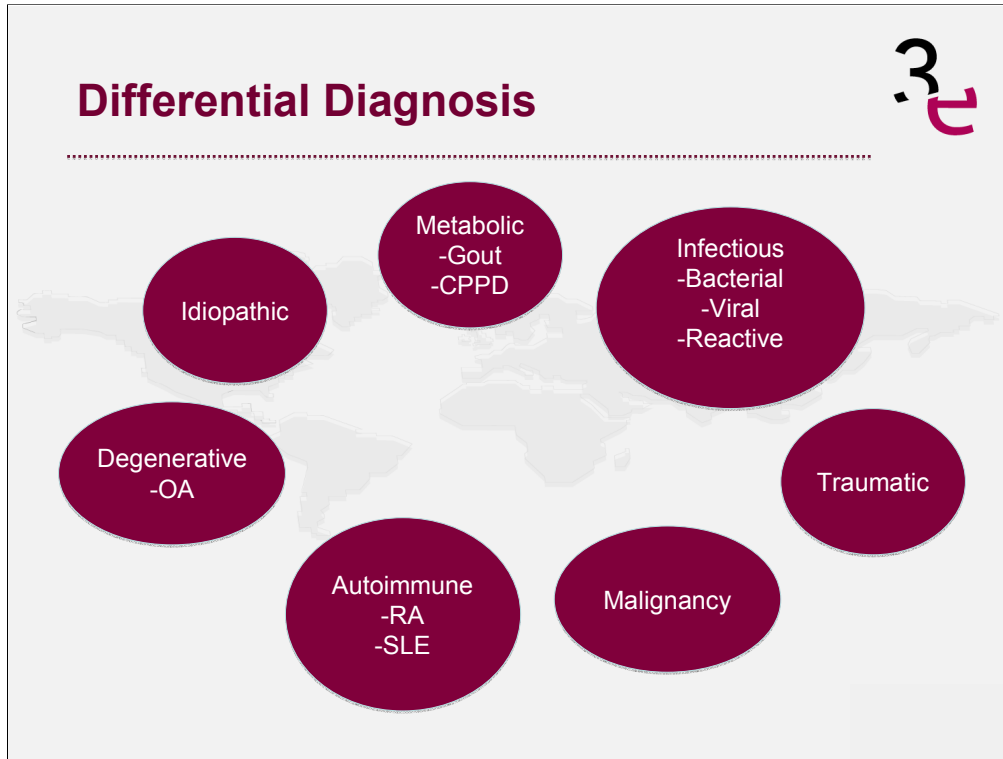
UPIA as Defined by 3e

A patient in whom clinically apparent joint swelling (synovial proliferation or synovial fluid) is observed by the rheumatologist

AND

who does not fulfil diagnostic/classification criteria for any rheumatologic disorder after the initial visits and diagnostic investigations

The definition of UPIA is controversial and there is no widely accepted classification criterion for this condition. During the 2008-2009 3E Initiative kick-off meeting, experts decided that only patients in whom clinically apparent joint swelling should be included. The patient is considered “undifferentiated” if he/she does not fulfil diagnostic/classification criteria for any rheumatologic disorder after the initial visits and diagnostic investigations.



Differential Diagnosis of UPIA

Idiopathic

Metabolic – Gout

CPPD Infectious – Bacterial

Viral

Reactive

Degenerative – OA

Traumatic

Autoimmune – RA

SLE Malignancy

There are over 100 different types of arthritis. Above are a few examples, grouped by diagnostic category. Although the consensus was that it was impossible to name all possible diagnosis, it was felt that it is useful to mention some major disease categories to make sure that these are considered. These should be considered anytime a patient is assessed with new onset arthritis.

Which investigations should be ordered? 3

- **No standard baseline investigations were found that should be undertaken prior to inclusion of UPIA as a diagnosis**
- **Mentioned at least 50% of the time in reviewed articles and relevant to this question:**
 - **History**
 - **Physical examination**
 - **Tender and swollen joint count**
 - **Rheumatoid factor (RF)**
 - **Anti-nuclear antibodies (ANA)**
 - **Erythrocyte sedimentation rate (ESR)**
 - **C-reactive protein (CRP)**
 - **X-rays of the hands and feet**

Which Investigation should be ordered?

• From our systematic review of the literature, we found no standard baseline investigations that should be undertaken prior to inclusion of UPIA as a diagnosis

• History, physical examination, tender and swollen joint count, rheumatoid factor (RF), anti-nuclear antibodies (ANA), erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) and x-rays of the hands and feet were the only items mentioned at least 50% of the time in the articles we reviewed that were relevant to this question

Which investigations should be ordered? 3

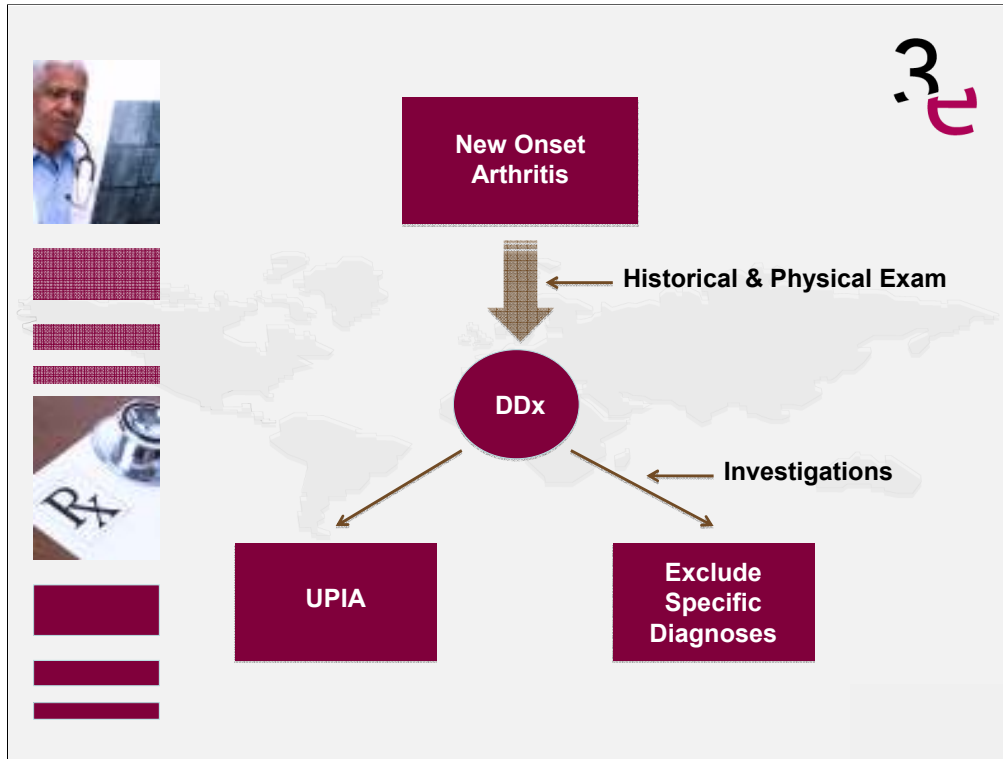
However,

- **Consider all possible causes of arthritis in the differential diagnosis**
- **Complete history and thorough physical examination will determine the ranking order of possible differential diagnoses**
- **Investigations should be based on the differential diagnosis of the patient**

Which investigations should be ordered? (Continued)

However,

- All possible causes of arthritis should be considered in the differential diagnosis
- Complete history and thorough physical examination will determine the ranking order of possible differential diagnoses
- Investigations should be based on the differential diagnosis of the patient



The first recommendation describes the process of arriving at a diagnosis of UPIA. In any patient with new onset arthritis, it is critical to consider all possible differential diagnosis. A ranking of the DDx can be made after a thorough history and physical exam. Investigations should then be directed at this. If the results of the history, physical examination and focused investigations do not yield a specific diagnosis, then UPIA should be considered.

UPIA is a Dynamic Condition

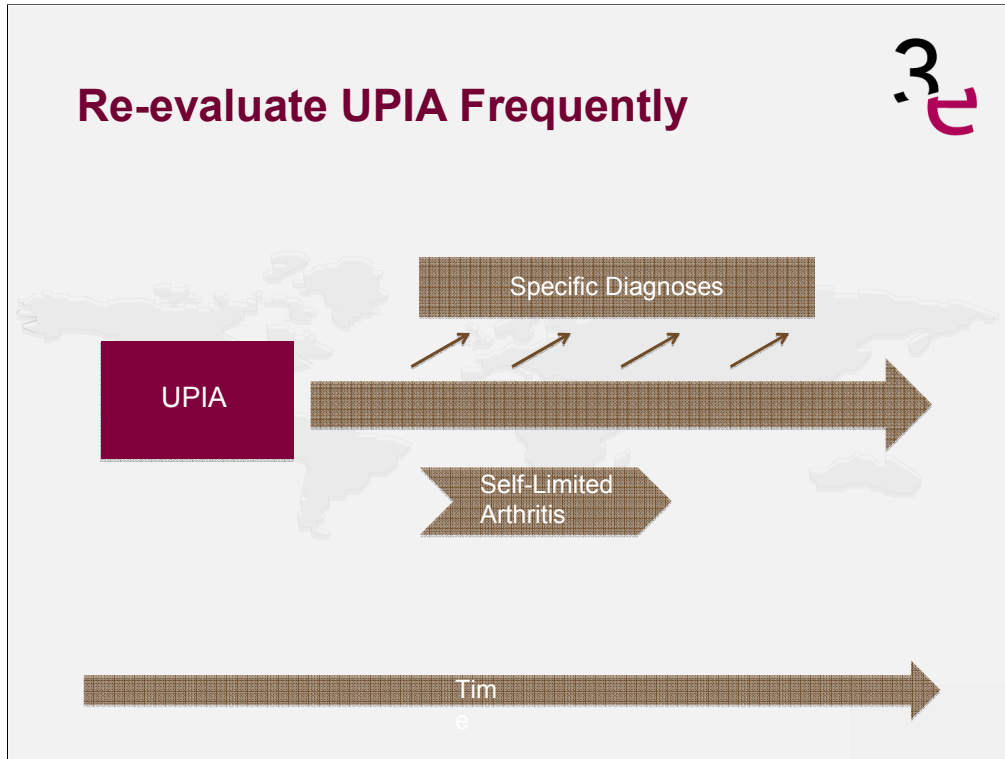


- **UPIA should be constantly reconsidered, as patients may develop a specific diagnosis anytime.**
- **UPIA may also remit**

UPIA is an dynamic condition

- UPIA should be constantly rethought, as patients may develop a specific diagnosis anytime.
- UPIA may also remit

Re-evaluate UPIA Frequently



It should be stressed, though, that UPIA is a diagnosis of exclusion, and should be constantly re-evaluated, an initially undifferentiated inflammatory arthritis may progress into a specific diagnosis over time. Moreover, this recommendation applies only if arthritis persists, and not if it is self-limiting.

Summary



- **UPIA is a diagnosis of exclusion**
- **UPIA should be considered after a full history, physical examination**
- **Consider UPIA if appropriate investigations fail to yield a specific diagnosis in a patient with inflammatory arthritis**
- **Reconsider a diagnosis of UPIA over time as it may evolve into specific diagnoses or spontaneously remit**

Summary

- UPIA is a diagnosis of exclusion, which should be considered after a full history, physical examination and appropriate investigations fail to yield a specific diagnosis in a patient with inflammatory arthritis
- The diagnosis should be reconsidered over time, as UPIA may evolve into specific diagnoses and may spontaneously remit

References - Diagnosis



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This list of references includes the studies which were identified through the systematic literature search and used to formulate the recommendation.

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References - Prognosis



- Barton A et al. Macrophage migration inhibitory factor (MIF) gene polymorphism is associated with susceptibility to but not severity of inflammatory polyarthritis. *Genes and Immunity* 2003;4:487-91.
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References – Prognosis (cont.)



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