





رَبَّنَا لَا تُزِعْ قُلُوبَنَا بِعَدَ إِذْ هَدَيْتَنَا وَهُبُ لَنَا مِن لَدُنكَ رَحْمَةً إِنَّكَ أَنتَ ٱلْوَهَّابُ ٢

Our Lord! Let not our hearts deviate after You have guided us, and grant us mercy from You. Truly, You are the Bestower.

[Al-Quran 3:8]



Vision

- To impart evidence based research oriented medical education
- To provide best possible patient care
- To inculcate the values of mutual respect and ethical practice of medicine

Professor Umar Model of Integrated Lecture







RHEUMATOLOGY LECTURE:2



"Inflammatory Arthritis"

Dr Shamaila Mumtaz FCPS (Medicine), FCPS (Rheumatology) Rheumatologist, Rawalpindi Medical University

Learning Objectives

At the end of this session students will be able to learn:

How to diagnose "inflammatory arthritis" on the basis of history and examination

Relevant Investigations

Guidelines and recent advances





Rheumatological Diseases

Joint Diseases (Arthritis)

Soft tissue Rheumatism

Systemic Diseases (Auto-immune/Vasculitis)

Bone Disorders

Arthritis



Mechanical (Osteoarthritis)

Inflammatory (RA, SPA)

- Infective (Septic, Tuberculous)
- Crystal arthropathy (Gout)



Core Concept

Case Scenario



30-years old lady, who delivered her third baby 6

months back presented with pain, swelling and EMS

(lasting till mid day) involving small joints of hands and

feet for 3 months. At first glance, you have noticed that

she has multiple swollen hand joints.

Case Scenario

- Chronic (6 week plus)
 - Polyarthritis (more than 4 joints)
 - Symmetrical (usually, not always)
- Inflammatory











A.	Joint involvement	
	1 large joint	0
	2-10 large joints	1
	1-3 small joints	2
	4-10 small joints	3
	>10 joints (≥1 small joint)	5
В.	Serology (≥1 test result needed)	
	Negative RF and negative ACPA	0
	Low-positive RF or low-positive ACPA	2
	High-positive RF or high-positive ACPA	3
C.	Acute-phase reactants (≥1 test result needed)	
	Normal CRP and normal ESR	0
	Abnormal CRP or abnormal ESR	1
D.	Duration of symptoms	
	<6 wk	0
	>6 wk	1

What happens if treatment is delayed ?

The Clinical Spectrum of RA



Early PIP swelling



Active with some deformity



Late-stage deformities



Images courtesy of J. Cush, 2005.









"TREAT TO TARGET" - T2T





Synthetic (s-DMARDs)

Biologic (b-DMARDs)

Targeted Synthetic (ts-DMARDs)

Synthetic DMARD's: - single-tripple

Methotrexate (backbone)

Leflunamide, Sulfasalazine, HCQ







BIOLOGICS IN RA

- Cytokines such as TNF- α ,IL-1,IL-6 etc. are key mediators of immune function in RA and have been major targets of therapeutic manipulations in RA.
- Various biologicals approved in RA are:-
- Anti TNF agents : Infliximab, Etanercept, Adalimumab
- IL-1 receptor antagonist : Anakinra
- * IL-6 receptor antagonist : Tocilizumab
- Anti CD20 antibody : Rituximab
- T cell co-stimulatory inhibitor : Abatacept



Rheumatoid Disease

- Cutaneous nodules
- Eye involvement
- ILD
- Rheumatoid Vasculitis



- Ankylosing spondylitis
- Psoriatic Arthritis
- Enteropathic Arthritis
- Reactive Arthritis







Pathophysiology

Both genetic & environmental factors appear to be involved

HLAB27 presents an antigen to the CD8+ T cells & in turn activates the immune system

(TNF)- α & (IL-1) are thought to play role in the inflammatory reactions

to attack the fibrocartilage , AS involves inflammation, cartilage erosion

Shristi Shrestha



Chronic (3 months plus)

Spondyloarthropathy (SIJ, Axial skeleton)

Sero-negative (RF, ACPA – negative)

HLA B27 - positive





Question mark posture

Question mark posture, or suppliant posture loss of lumbar lordosis, fixed kyphosis, compensated extension cervical spine, protruberant abdomen.



@ Medicine Net, Inc.

Modified Schober test

 In this test marks are made 5 cm below and 10 cm above the sacral dimples.

80 00 CO 100

- The distance between these marks should increase from 15 cm to at least 20 cm with lumbar flexion.
- The distance less than
 5 cm is abnormal.





Pro PowerPoint.R.











In patients with back pain for ≥ 3 months, age < 45 years









There is a ligament (arrow head) in front of the vertebrae. It is flexible & not normally seen in a normal person. It gets calified, thick in Ankylosing Spondylitis & is seen.

Dr. S. Akerkar http://doctorakerkar.wordpress.com/



Monitor validated AS disease activity measure, and CRP or ESR regularly

Unsupervised back exercises, formal group or individual self-management education, fall evaluation/counseling

Take home message



 Rheumatoid Arthritis is a chronic symmetrical inflammatory polyarthritis – T2T approch is used to prevent joint damage and deformities.

Spondyloarthropathy should be suspected in young patients (less than 45 years old) with history of inflammatory backache for more than 3 months.

Recent Advances



 JAK-inhibitors are novel oral agents approved for use in Inflammatory arthritis including rheumatoid arthritis and ankylosing spondylitis.

References



Davidson's textbook of Internal Medicine

 American College of Rheumatology guidelines for management of Rheumatoid Arthritis and Spondyloarthropathy



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