

Inflammatory Back Pain (IBP) Referral Algorithm in Malaysia



CTX.AS.20MY.2006.192520

Inflammatory Back Pain (IBP) Referral Algorithm in Malaysia

Contributing Authors

Dr. Lau Ing Soo

Senior Consultant Rheumatologist
& Head of Department (Medicine)
Hospital Selayang,
Selangor

Dr. Mollyza Mohd Zain

Senior Consultant Rheumatologist
(National Head of Rheumatology, MOH)
Hospital Selayang,
Selangor

Dato' Dr. Gun Suk Chyn

Senior Consultant Rheumatologist
Hospital Tuanku Ja'afar,
Negeri Sembilan

Dr. Yeap Swan Sim

Senior Consultant Rheumatologist
Subang Jaya Medical Centre,
Selangor

Dr. Habibah Mohd Yusooif

Senior Consultant Rheumatologist
Hospital Selayang,
Selangor

Assoc. Prof. Dr. Sargunan Sockalingam

Lecturer &
Senior Consultant Rheumatologist
University Malaya Medical Center,
Kuala Lumpur

Assoc. Prof. Dr. Fariz Bin Yahya

Lecturer &
Consultant Rheumatologist
University Malaya Medical Centre,
Kuala Lumpur

The Curious Case of Back Pain!



Dr. Chong
Doctor at
Primary
Care Center



Dr. Nabila
Rheumatologist



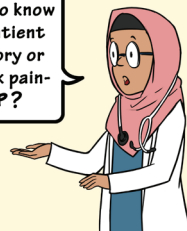
Hi Doc,
I see many
young patients
with chronic
low back
pain.

It's often
difficult to
make a
diagnosis.



IBP?
MBP?

It's important to know
whether the patient
has inflammatory or
mechanical back pain-
IBP or MBP?



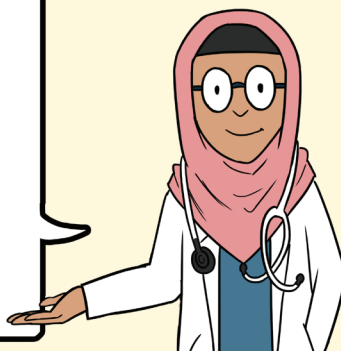
Inflammatory Back Pain (IBP)



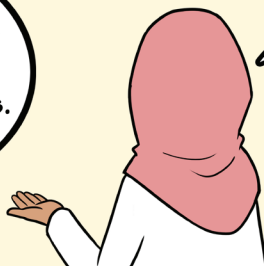
- Age ≤ 40 years
- Improves with exercise
- Nocturnal pain (2nd half of night)
- Morning stiffness >30 mins
- Pain localized to the Lumbar region
- Alternating buttock pain

Mechanical Back Pain (MBP)

- Any age
- Improves with rest



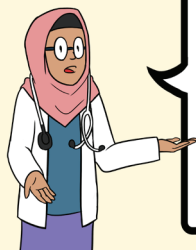
Thanks, doc.
I will now actively
look for IBP in my
back pain patients.



Remember, IBP is
strongly associated with
Axial Spondyloarthritis
(Axial SpA).
Follow the 3 "R"s when
you see a low back
pain patient.

3 "R"s

- Recognise IBP
- Review (History & relevant Investigations)
- Refer to a rheumatologist on suspecting axial SpA.



Together,
we can manage
Inflammatory Back
Pain and axial
SpA patients
better.



Consensus Statement on an Inflammatory Back Pain Referral Algorithm in Malaysia

Ing Soo LAU¹, Suk Chyn GUN², Swan Sim YEAP³, Mollyza Mohd ZAIN¹, Habibah Mohd YUSOOF¹, Sargunan SOCKALINGAM⁴, Fariz Bin YAHYA⁴

¹Hospital Selayang, Selangor, Malaysia

²Hospital Tuanku Ja'afar, Seremban, Malaysia

³Subang Jaya Medical Center, Selangor, Malaysia

⁴University Malaya Medical Centre, Kuala Lumpur, Malaysia

Chronic low back pain in Malaysia

- Prevalence of back pain in Malaysia ~12%¹.
 - **5th** most common complaint in the **private** primary healthcare
 - **9th** most common complaint in the **public** primary healthcare
- Malaysian low back pain management guideline (2010): management of low back pain in general and **lack focus on chronic inflammatory back pain**².

Why is recognizing chronic low back pain important?

- **Chronic low back pain (CLBP)** is defined as back pain persisting for **more than 3 months**.
- CLBP is associated with significant morbidity³.
- Avoiding a delay in diagnosis is essential. CLBP may lead to
 - diminished mobility
 - work absenteeism
 - burden on the healthcare system⁴
- CLBP can be divided into 2 main groups: **Inflammatory back pain (IBP) or mechanical back pain (MBP)**.

What is inflammatory back pain?

- **Inflammatory back pain (IBP)** is a chronic pain condition localized to the axial spine and sacroiliac joints.
- **IBP** can be differentiated from **MBP** by a set of key diagnostic features.
- The symptoms of IBP include:
 - Insidious onset of back pain
 - Morning stiffness in the lower back of >30 minutes
 - Improvement of back pain with exercise
 - No improvement with rest
 - Awakening at night or in the early morning because of back pain
 - Alternating buttock pain

IBP is highly associated with Spondyloarthritis (SpA), an underlying inflammatory arthritis in the spine, and other joints.

- **Axial SpA** with primarily spine or axial involvement **typically present with IBP**. Conditions including:
 - **Ankylosing spondylitis**
 - **Non-radiographic axial SpA**
- Peripheral SpA with predominantly peripheral joint involvement may also have symptoms of IBP. Conditions including:
 - Psoriatic arthritis
 - Reactive arthritis
 - Enteropathic arthritis



Patient with back pain



Doctor

Inflammatory Back Pain 3R Algorithm

Review

History & Symptoms

- Pain located in lumbar area
- Alternating buttock pain
- Nature of symptoms
- Duration of symptoms

Investigations

- X-ray of Sacroiliac joint* (consider gonadal radiation exposure)
- ESR, CRP

* Normal X-ray does not rule out the possibility of Axial SpA diagnosis

Other information

- Family history of rheumatological disorder, psoriasis or other autoimmune condition
- Associated symptoms eg. Uveitis, psoriasis, peripheral joint inflammation, features of inflammatory bowel disease
- Treatments used thus far

Red flags

Acute onset pain, fever, unexplained weight loss, incontinence, history of cancer, unilateral back/sacro-iliac joint pain.

YES

NO

Patients with red flags symptoms should be referred urgently to secondary care for further assessment.

Suggested GP management

- NSAIDs for symptom management unless contraindicated
- Physiotherapy for prescription of stretching/ROM exercises

Recognise

Inflammatory Back Pain Assessment ASAS Expert Criteria

Have you suffered from Back Pain for more than 3 months?

If Yes:

	YES	NO
1. Did your back pain start when you were aged 40 or under?	<input type="checkbox"/>	<input type="checkbox"/>
2. Did your back pain develop gradually?	<input type="checkbox"/>	<input type="checkbox"/>
3. Does your back pain improve with exercise?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you find there is no improvement in your back pain when you rest?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you suffer from back pain at night which improves upon getting up?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to at least 4 out of 5 questions is "yes", then please refer the patient to a rheumatologist

Adapted from Sieper J et al. New Criteria for Inflammatory Back Pain in patients with chronic back pain: a real patient exercise by experts from the Assessment of Spondyloarthritis international Society (ASAS). Ann Rheum Dis 2009; 68: 784-8.

Refer

- To a rheumatologist

Find a centre with rheumatology service here:

<https://msr.my/rheumatology-services/list-of-hospitals/>



Rheumatologist

Inflammatory Back Pain (IBP) Referral Algorithm – Malaysia

Why is it important to identify IBP early?

- The mean age of **onset of symptoms is in the mid-20s⁷**, a point considered as the normally most productive time of life.
- An unacceptably long delay, averaging 8 to 11 years⁶, between the onset of symptoms and the time of diagnosis for axial SpA.
- A longer delay in diagnosis may lead to worse functional outcome.
- If undiagnosed and untreated, or not treated effectively enough, will lead to psycho-socioeconomic consequences:
 - continuous suffering from pain, stiffness, and fatigue
 - loss of spinal function and mobility
 - reduction in quality of life, and work productivity
 - increase in direct and indirect medical costs
- Effective treatments, such as biologics, for the treatment of axial SpA have now become available.
- It is important to **identify potential patients with axial SpA** by clinicians, especially in primary care setting in order to reduce delay of diagnosis and effective management.

How can I identify inflammatory back pain (IBP) in my practice?

- The Assessment of SpondyloArthritis international Society (ASAS) for IBP questionnaire has been found to be robust, easy to apply and with good specificity and sensitivity^{5,8}.
- Follow the steps from the **3R algorithm (Recognise-Review-Refer)** in Figure 1 to identify and refer patients with inflammatory back pain.
- Patients with red flags symptoms should be referred urgently to secondary care for further assessment.

References

1. Sivasampu S, Yvonne L, Norazida AR, Hwong WY, Goh PP, Hisham AN, National Medical Care Statistics (NMCS), author. Kuala Lumpur: National Clinical Research Centre; 2012. 2014.
2. The Malaysian Low Back Pain Management Guidelines (First edition). 2010. Available at <https://www.masp.org.my/index.cfm?menuid=23>.
3. Borenstein DG and Calin A. Fast facts: Low back pain (second edition). Health Press. 2012.
4. Walker BF, Muller R, Grant WD. Low back pain in Australian adults: prevalence and associated disability. J Manipulative Physiol Ther. 2004;27(4):238-44.
5. Poddubnyy D, Callhoff J, Spiller I, et al. Diagnostic accuracy of inflammatory back pain for axial spondyloarthritis in rheumatological care. RMD Open 2018;4:e000825. doi:10.1136/rmdopen-2018-000825
6. Ernst Feldtkeller, Muhammad Asim Khan, Desiree van der Heijde, Sjeff van der Linden, Jurgen Braun. Age at disease onset and diagnosis delay in HLA-B27 negative vs. positive patients with ankylosing spondylitis. Rheumatol Int (2003) 23: 61–66 DOI10.1007/s00296-002-0237-4
7. J Sieper, M Rudwaleit, Early referral recommendations for ankylosing in primary care. Ann Rheum Dis 2005;64:659–663. doi: 10.1136/ard.2004.028753
8. Sieper J, van der Heijde D, Landewé R, et al New criteria for inflammatory back pain in patients with chronic back pain: a real patient exercise by experts from the Assessment of SpondyloArthritis international Society (ASAS). Annals of the Rheumatic Diseases 2009;68:784-7