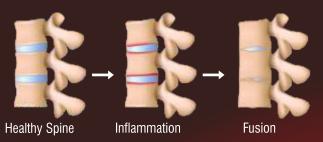
#### Lets understand

## **Ankylosing spondylitis (AS)**



It is type of arthritis that mainly affects the back. Ankylosing means stiffening, Spondylitis means inflammation of the spine.

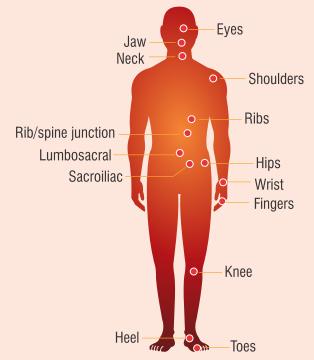
AS is also an autoimmune disease, meaning the body's own immune system attacks healthy tissue. In AS the immune system attacks and targets the ligaments and tendons attached to bone in the joints of the spine.

The bone erodes at these sites and the body tries to repair itself by forming new bone. Due to this the bones of the spine begin to fuse, or grow together, causing the spine to become stiff, inflexible and painful. Even though new bone forms, the original bone in the spine can become thin, increasing the risk of spinal fractures.

## **Ankylosing spondylitis**

can also affect other joints and organs in the body, such as the eyes, lungs, kidneys, shoulders, knees, hips, heart & ankles.

#### **Area of inflammation**



2

# Typical symptoms of Ankylosing spondylitis include:



Lower back or neck pain

Stiffness in the morning which wears off during the day or with activity





Pain in your sacroiliac joints (the joints where the base of your spine meets your pelvis), our buttocks or the backs of your thighs

Tiredness (Fatigue)



## Other possible symptoms include:



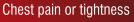
Pain and swelling in joints other than those in the spine

Tenderness or discomfort around your heels





Swollen fingers or toes







Eye inflammation (painful, redness in eyes)

## Ankylosing spondylitis can affect anyone

Although it's more common in young men and most likely to start in your late teens and 20s. It's linked to the genes we inherit, but having Ankylosing spondylitis doesn't mean you'll definitely pass it on to your children



## Cause of Ankylosing spondylitis

- The exact cause of Ankylosing spondylitis is not clear.
- The main gene involved in all types of Ankylosing spondylitis is HLA-B27.
- Although the HLA-B27 gene doesn't cause the condition, it can increase your risk of developing it.

## Risk factors for the Ankylosing spondylitis:

- **Gender** Men are at higher risk of developing the disease than women.
- Age The condition usually develops in late adolescence or early adulthood.
- HLA-B gene Thought to increase the risk of developing Ankylosing spondylitis
- Inheritance A family history of Ankylosing spondylitis
- Frequent gastrointestinal infections

## Complications of Severe Ankylosing spondylitis:

In rare cases, people with severe Ankylosing spondylitis may develop serious complications, including:

#### Bamboo spine

In severe, advanced cases of Ankylosing spondylitis there is a complete fusion of the bones of the spine, turning the spinal column into one long bone, which some people say resembles a bamboo stalk.

#### A hunched posture

A curled forward, chin-to-chest stance can occur if the spine fuses together in a hunched forward position.

#### Bone fractures

Bones may lose mineral density (Osteopenia and Osteoporosis) making them brittle and prone to fractures. This condition is considered a medical emergency.

#### Cauda equina syndrome

This rare condition involves extreme pressure and swelling of the nerves at the end of the spinal cord.



## The Test

## Could your Chronic back pain be caused by Ankylosing spondylitis?

This quiz is not a diagnostic tool, but is created for informational purposes

## \*Take the Inflammatory Back Pain Quiz

0	Did your pain and stiffness develop gradually, with symptoms persisting at least three months?	☐ Yes

2 Did your back pain and stiffness start before the age of 45?	☐ Yes
--	-------

3	Does your pain and stiffness tend to ease with physical activity and exercise?	☐ Yes ☐ No

4 Do you find there is no improvement in y	our Yes
back pain when you rest?	□ No

10

<b>5</b> Do you suffer from increased back pain and	☐ Yes
discomfort when immobile during sleep,	□ No
and start to feel better once up and moving?	)

## If You have 4 Yes or More: it is likely Inflammatory Back Pain

**Inflammatory Back Pain (IBP)** is strongly associated with Ankylosing spondylitis, however, other causes are also possible

**Note**: Only a physician can diagnose Ankylosing spondylitis, but the following five questions can help determine if your pain and symptoms are characteristic of inflammatory back pain, which is strongly associated with Ankylosing spondylitis.

This quiz is adapted from the ASAS (The Assessment of SpondyloArthritis International Society) criteria for identifying inflammatory back pain

## **Medications**



For many people with Ankylosing spondylitis, the combination of regular medication and exercise can control symptoms and reduce the long-term effects of the disease.

A group of drugs called NSAIDs (anti-inflammatory drugs) are the first and most common type of medication that people with ankylosing spondylitis use.

If NSAIDs have not controlled your disease, another type of medicine called DMARDs and Biologics may be prescribed by your Rheumatologist. These medicines work by blocking specific components in the immune system, to reduce inflammation and pain

Whichever medications your doctor prescribes for you, be sure to take them as directed, even when you seem to be feeling fine. Also, talk to your doctor about possible side effects and what to do if they occur. If your symptoms worsen, call your doctor.

## **Tip for Ankylosing Spondylitis**

### Staying active with exercise

- Regular exercise help ease the pain, maintain flexibility and improve posture.
- Your Doctor or Physiotherapist can design a program of exercises to meet your needs.
- Swimming is an excellent way to exercise since it promotes flexibility of the spine; movement of the neck, shoulder and hip joints; and deep breathing

### **Practicing good posture**

Pay close attention to posture is very important to help keep the spine mobile and maintain a good quality of life.



#### While sitting

If you will be sitting for a long time, sit up straight in your chair and move regularly- stand up and stretch every 20 minutes.

## **Tip for Ankylosing Spondylitis**

#### While driving

When driving, a small cushion on the seat back will support your lower back, and you should also stop regularly for stretches.

#### While sleeping

- Make sure that your bed is firm but not too hard, and use only one soft pillow.
- Try to sleep on your stomach without a pillow under your head.
- You also can try sleeping on your back with a thin pillow or one that supports the hollow of your neck.
- Keep your legs straight rather than sleeping in a curled position.
- If you find it difficult to sleep in these positions, talk to a physical therapist about other possible options.

## **Tip for Ankylosing Spondylitis**

### **Applying heat and cold**

(Heating pads, hot baths, showers) Can ease pain and stiffness, and ice may help reduce swelling of inflamed areas.



## **Quitting smoking**

As it may reduce the capacity of the lungs, leading to shortness of breath and consequently putting a strain on the spine.



### **Moderating alcohol consumption**

Keeping in mind that anti-inflammatory medicines and alcohol should not be taken together



### **Eating well and healthy**

Being overweight increases the burden on joints and may increase the pain.

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## **Tip for Ankylosing Spondylitis**

## Healthy diet-Healthy food habits



- Eat a variety of healthy foods
- Eat plenty of vegetables, fruits, and whole-grain products.
- Use fat (especially saturated fat found in animal products), cholesterol, sugar, and salt in moderation.
- Minimized processed foods, as well as those heavy in artificial preservatives and sweeteners.
- Drink 8 to 10 glasses of water a day.

#### **References Links**

https://spondylitis.org/about-spondylitis/inflammatory-vs-mechanical-back-pain/

https://arthritis.ca/about-arthritis/arthritis-types-(a-z)/types/ankylosing-spondylitis

https://www.healthline.com/health/spondyloarthritis#outlook

https://ankylosingspondylitisnews.com/risk-factors-of-ankylosing-spondylitis/

https://www.arthritishealth.com/types/ankylosingspondylitis/complications-severe-ankylosing-spondylitis

https://spondylitis.org/about-spondylitis/could-i-have-spondylitis/

https://ankylosingspondylitisnews.com/living-ankylosingspondylitis/

https://orthop.washington.edu/patient-care/articles/arthritis/ankylosing-spondylitis.html