ANKYLOSING SPONDYLITIS (AS) - FAQs

What is Ankylosing spondylitis?

It is a type of spondyloarthritis, an autoimmune disease which targets the spine predominantly.

Ankylos- stiffening of joint

Spondlyo – vertebrae

What causes Ankylosing spondylitis?

Exact cause is unknown. Most autoimmune disease have genetic risk factors and environmental triggers which dysregulate immune system. The immune system starts attacking the joints & other structures. In AS, it attacks the sacroiliac joints, joints of the vertebrae, hip & occasionally the other joints. It may also attack other structures including the eyes.

In what way is Ankylosing spondylitis different from other arthritis like Rheumatoid arthritis?

In Rheumatoid arthritis, inflammation of joints is the hallmark whereas in AS the sites where ligaments and tendons attach to bones called entheses are inflamed. Rheumatoid arthritis predominantly affects the hand & feet joints as well as large joints like the knee, ankle, shoulder. Ankylosing spondylitis mainly affects the sacroiliac joints (located beneath the buttocks), vertebral joints & hips, knee & ankle.

Who gets Ankylosing Spondylitis?

AS usually begins in adolescents/young adults. It presents usually before 45 years of age. Men 2-3 times more likely to develop AS than women. Family members of patients with AS are also at a higher risk.

What is the most common symptom of Ankylosing spondylitis?

Main symptom of AS is low back pain. Back pain of ankylosing spondylitis usually is severe at rest and gets better with activity. It is more severe in the nights and is associated with a stiff back early in the morning for atleast more than 30 minutes.

Can Ankylosing spondylitis also cause pains in limbs ?

AS can also cause joint pains usually in the lower limbs. Heel pain, sole pain are also common.

How is Ankylosing Spondylitis diagnosed ?

Rheumatologist asseses your medical history , examines the musculoskeletal system and based on the clinical scenario orders for imaging and blood tests. Xray of sacroiliac joint ± spine or MRI may be ordered to make a diagnosis. HLA B27 genetic testing may also be ordered as a part of work up.

If I have HLA B27 positivity, does that mean I have AS ?

Not always. Some people have the HLA-B27 gene but do not develop AS. This test has to be interpreted by your Rheumatologist in conjunction with the clinical scenario and imaging evidence.

Can the HLA B27 test be negative in ankylosing spondylitis?

Yes. HLA B27 is positive in majority of the patients. However there are other genes that can cause AS & HLA B 27 is need not always be positive in a person suffering from AS. This also means that AS can be diagnosed without the HLA- B 27 test.

How does Ankylosing spondylitis progress?

Over a period of time with persistent inflammation, calcium gets deposited on ligaments of the spine. The vertebral joints fuse & become stiff. This leads to difficulty in bending, turning the neck.

How do Xray/ MRI help diagnosis of ankylosing spondylitis?

Xrays pick up the calcification of spinal ligaments & fusion of the sacroiliac joints. This helps diagnosis of AS. However calcification of the ligaments happens after years & hence X-rays can miss the diagnosis of AS in early stages. MRI picks up the inflammation (swelling) in the sacroiliac joints & help early diagnosis of AS.

Can Ankylosing spondylitis be cured ?

There is no cure for AS. But early treatment relieves symptoms and prevents progression of disease.

How is Ankylosing spondylitis treated?

The first line of treatment are the NSAIDs / pain killers like indomethacin, diclofenac, aceclofenac etc. No NSAID is superior to another. These drugs give relief from pain for most patients.

For joint and tendon related pains local injections of steroids (localized joint pain, tendon sheaths) or oral steroids (multiple joint pains) are effective. If there is no response to the above treatment, disease modifying antirheumatic drugs (DMARDs) such as sulfasalazine, methotrexate, leflunomide may be useful.

STEROIDS AND DMARDS HAVE NO PROVEN ROLE IN RELIEVING SPINAL SYMPTOMS AND HALTING THE DISEASE PROGRESSION IN THE SPINE.

Biologics like TNF alpha blockers are the most effective drugs available in treating the spinal and peripheral joint symptoms. Examples of TNF alpha blockers available in our country are infliximab (administered as Intravenous infusion), etanercept, adalimumab, golimumab (administered under the skin).

However TNF alpha blockers are expensive and like all other drugs have their share of side effects like infections.

Is there any role for physiotherapy in ankylosing spondylitis?

Patients must do regular exercises that promote spinal extension and mobility as advised by the doctor and physiotherapist. Activities like aerobics, walking, swimming etc are encouraged

Do patients with ankylosing spondylitis need Surgical treatment?

Total hip replacement is done for those with severe hip arthritis. Spinal surgery is rarely needed to correct excess deformities of the neck or for low trauma fractures.

What are the other problems that are associated with ankylosing spondylitis ?

Uveitis : Inflammation of a part of eye causing redness with or without pain. Eye examination by ophthalmologist as and when suggested by your Rheumatologist is a must for AS patients.

Psoriasis : Any changes in skin, nail and scalp must be reported to your Rheumatologist .in the form of Patches, scaly plaques, discolored nails ,excessive dandruff could be psoriasis which is seen in some patients with AS and vice versa. Psoriasis is managed in conjunction with a dermatologist.

Gastrointestinal symptoms : diarrhea and constipation could be due to intestinal inflammation which need further evaluation by Rheumatologist in conjunction with gastroenterologist.

Osteoporosis : Long standing AS and those with fused spine are at risk for developing osteoporosis which needs evaluation by the Rheumatologist. You may need to take calcium and vitamin D supplements and anti-osteoporotic as prescribed by Rheumatologist

I have AS. I have heard that it runs in families. Should I plan a family?

If you are HLA B 27 positive & your child inherits the gene, there is only 5- 20% chance that he/ she will develop AS. If you are HLA B 27 negative, then the chance of your child developing AS is even lower. Hence you AS should not deter you from starting a family.

Should I get my child's HLA B 27 test done?

As pointed earlier HLA B 27 alone does not necessarily mean AS. Even if your child is HLA B 27 positive, the risk of him/ her developing AS is only 5-20%. There are no known preventive strategies known as of now to prevent future development of AS. Hence, getting your child HLA B27 test does not serve any purpose if he/ she has no symptoms of AS.

Is stem cell therapy useful for ankylosing spondylitis?

No. Stem cell therapy for AS is in experimental stages & is currently not approved/ proven to be useful for AS.

Does smoking affect ankylosing spondylitis?

Yes. Smoking has been shown to increase the inflammation of AS & also reduce the responsiveness to therapy.