

## Smoking makes Rheumatoid Arthritis worse

13 May 2019 | Views

**Dr. Ayan Ray, consultant, department of orthopedic and joint replacements & Dr. Ranjan Kr. Das, consultant, department of respiratory medicine, CK Birla Hospitals-CMRI, Kolkata talks about connection between smoking and rheumatoid arthritis**



Smoking is harmful to your bones, joints and connective tissue as well. No matter what form of arthritis you have, you'll be doing your joints and yourself a favor by quitting. Smoking is linked to the development of Rheumatoid Arthritis, particularly for people who have smoked 20 years or longer. Smokers also have an increased risk of more-severe rheumatoid arthritis. In addition, they may be less likely to experience remission. Smoking decreases the effectiveness of some drugs used to treat rheumatoid arthritis and can be a barrier to engaging in activities that may relieve symptoms of rheumatoid arthritis, such as exercise.

The exact reason why smoking is linked to rheumatoid arthritis isn't well-understood, but in fact smoking somehow ignites faulty immune system functioning in people genetically predisposed to getting rheumatoid arthritis.

Both environmental and genetic factors play a role in who gets rheumatoid arthritis, and smoking is considered one of the most important environmental risk factors. But it's a risk factor that's completely preventable. Many people with RA aren't aware that smoking makes their condition worse, so they don't see it as a reason to quit. Plus, there are factors unique to rheumatoid arthritis that may make it more challenging to quit smoking. These factors include the idea that smoking is a distraction that helps people cope with the pain of RA and feelings of isolation and lack of support. But quitting smoking is important for your overall health too. Along with increasing RA risks, smoking also ups your odds of:

- **Lung and other cancers**
- **Stroke**
- **Respiratory disease**
- **Cardiovascular disease**
- **Osteoporosis**

You already know smoking is bad. You know you should quit. But did you know smoking also has a negative effect on your arthritis? Not only is smoking a proven risk factor for developing both rheumatoid arthritis and osteoarthritis, but it also can make your existing arthritis worse. Smoking has been shown both to increase disease activity and decrease the effectiveness of treatment medications. And since people with rheumatoid arthritis are already at an increased risk for cardiovascular

disease, choosing to smoke can be doubly harmful for your heart. Think twice before lighting up that cigarette. Nicotine-induced pain relief is short-term. Over time, smoking may worsen your pain. Smokers are nearly three times as likely to get lower back pain. Smoking may aggravate abdominal pain and joint pain, as well. In fact, smoking may increase pain sensitivity in general.

It is known that smoking causes damage in a variety of ways. It clearly promotes cell death, increases general inflammation, elicits the creation of antibodies to the body's own tissues and causes epigenetic changes – modifications in gene expression and action. Smokers have higher levels of inflammatory proteins called cytokines in their body. These play a role in the joint and organ damage that comes with RA. Tobacco smoke causes your body to release all kinds of cytokines linked to inflammation in RA. Quitting smoking is difficult for anyone, and it may present a special problem for RA sufferers, who might find that lighting up a cigarette has a calming influence that can help them cope with RA's symptoms. However, the damage produced by smoking far outweighs any comfort it may provide, so it is essential that smokers with RA do everything possible to try to quit. Fortunately, there are effective strategies for quitting that may reduce the trauma associated with stopping.

The nicotine in tobacco can trick the body into feeling good — at first. It triggers the release of chemicals, like dopamine, which give off a satisfying, “reward” sensation. It's what makes smoking so addictive. But that same tobacco also impairs the delivery of oxygen-rich blood to bones and tissues. Decreasing blood and nutrient flow can cause degeneration, causes demineralisation, which already have more limited blood flow. The result can be lower back pain and sometimes osteoporosis. And above all, never forget that RA is not your fault. You did nothing to bring on this disease," he emphasizes but you can potentially make changes to try to minimize the effects of the disease, and stopping smoking is probably the most immediate step you can take that can produce significant benefits.