

Six Hot Topics in Rheumatology

Key questions and answers

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Question 1:

How important is light, sun light and the ingestion of vitamin D from food and drugs?

Answer:

The majority of vitamin D in our bodies is made by our bodies when we are exposed to natural sunlight. We also obtain a very small amount of vitamin D from some of the foods we eat.

Vitamin D is a precursor and is converted into a hormone which actually carries out the work in our bodies, called Hormone D. One of the main roles of hormone D is to increase absorption of calcium and phosphorus in the intestines. (Cortisone and Hormone D share the same chemical structure, as they are both cholesterol derivatives.)

Having the correct concentration of vitamin D in our blood stream allows our immune system to protect us from infections, inflammatory and autoimmune diseases and also some types of cancer. Therefore it is important to have healthy levels of levels of vitamin D in our blood, especially in winter and in Northern countries, when daylight is limited. Vitamin D supplements should be taken daily and not as a single, weekly, monthly or annual mega-dose.

Vitamin D helps us absorb calcium, a vital component of bones. In older people, taking Vitamin D supplements in winter is the most effective and safest way to help prevent and treat osteoporosis.

Question 2:

Why, for a long time, have low doses of cortisone derivatives been used to treat chronic rheumatic inflammatory, autoimmune diseases?

Answer:

Every night our bodies produce cortisone that is mainly used to protect us from infections, excessive immune responses, cancer cells and the effects of stress. Some people who have chronic stress from conditions such as depression/anxiety, chronic infections or severe chronic diseases will use all the cortisone their bodies produce during the night time, which results in deficient cortisone levels. How do we overcome this cortisone deficiency? By administering small doses of cortisone derivatives (i.e. prednisone) every night or very early in the morning. Modulating the immune system in this way, by re-introducing cortisone, will ensure the body is better protected against infections, excessive immune responses, cancer cells and the effects of stress.

Question 3:

Why are women more frequently affected by rheumatic immune/inflammatory diseases?

Answer:

Women are more frequently affected by rheumatic immune/inflammatory diseases because they have higher blood concentrations of oestrogens, and oestrogens normally increase the immune response. Oestrogens produce early antibodies, which protect the body from infections and other

antigens. However, in conditions where the immune system is activated or when oestrogens, such as contraceptives, are administered the body produces an excess of antibodies, which leads to an increased risk of immune/inflammatory disease.

One of the reasons that men are also affected by rheumatic immune/inflammatory diseases is that peripheral fat tissues, found in both men and women, produces oestrogens, which can lead to an increased production of antibodies.

Question 4:

What is the best approach to managing the first appearance of joint or musculoskeletal pain?

Answer:

Chronic pain is a neurological/biochemical alarm signal which is almost always the first sign of disease. Pain must never be masked with pain killers before the doctor has diagnosed the cause of the pain. The best way to treat acute and chronic pain is to target the cause of the pain. In cases of joint or musculoskeletal pain the first step is referral to a rheumatologist.

Question 5:

Why do some people get cold hands or feet and what is the treatment for cold hands or feet?

Answer:

Cold hands reflect an altered microcirculation, which is particularly common during winter and in women who are under emotional stress (Raynaud's phenomenon). However, in almost 20% of people who have cold hands, the cause isn't just functional and benign, but is the sign of connective tissue disease. In particular, systemic lupus erythematosus and systemic sclerosis might be clinically characterized, even in very early phases, by Raynaud's phenomenon.

How is the cause of cold hands or feet diagnosed? The best method is to test the levels of specific antibodies in the blood or to use nailfold capillaroscopy, which is a safe and inexpensive technique which uses a tiny microscope to examine the microvascular nail bed. After more than 30 years of intensive investigation, capillaroscopy is now officially considered by the EULAR and ACR guidelines as both an essential and mandatory diagnostic tool for the classification criteria of systemic sclerosis.

Question 6:

Is chronic low back pain almost always related to postural conditions or is it due to intervertebral disc prolapse?

Answer:

In large populations of primary care patients who had been experiencing chronic lower back pain symptoms for an average of 7-9 years, in at least 20-25% of cases (40-50% of which were men), the cause was related to axial inflammatory spondyloarthritis. To be able to diagnose early and correctly treat chronic back pain in men and women, it is important to consider that almost 60-70% of patients are diagnosed with an MRI scan, 25-30% with an X-ray and the presence of one other spondyloarthritis symptom, and 10-15% with a positive HLAB27 test.

To optimize treatment and reduce disease progression, targeted therapies are available.

However, axial inflammatory spondyloarthritis is only one cause of chronic lower back pain and almost 80% of cases of chronic low back pain are caused by postural conditions or intervertebral body disk conflict.