Treating RA Progression with DMARDs

by ELIZABETH MCSPIRITT

DMARDs for RA

For people with rheumatoid arthritis (RA) there are many options for drugs to help slow the progression of their disease and to help manage it. One of the newest classes of medications that your doctor may prescribe are biologics, or disease-modifying antirheumatic drugs (DMARDs for RA).

DMARDs for RA are a group of medications that aim to slow the progression of RA by reducing pain and inflammation, in addition to reducing or preventing joint damage and loss of function. Their effectiveness makes them one of the most widely used classes of medications to treat RA. They are also being used for other autoimmune diseases like ankylosing spondylitis, systemic lupus erythematosus, and psoriatic arthritis.

How do DMARDs Work?

Biologics work by breaking up the cycle of inflammation that causes RA to lead to pain, joint damage, and loss of function, and help to suppress your body's overactive immune system. Unlike NSAIDS (like ibuprofen or naproxen) and other RA medications, these drugs are not meant to provide immediate relief of symptoms and can take up to a month or two to decrease symptoms of your disease.

This class of medications can be broken down into traditional DMARDS, like methotrexate, sulfasalazine, and leflunomide, and biologics, like tocilizumab, abatacept and rituximab. Biologics target the cells of the immune system to decrease the inflammation and joint destruction seen in RA.

In RA, the usual first drug that patients get prescribed is a traditional DMARD called methotrexate in combination with glucocorticoids, such as prednisone. Unfortunately, nearly half of patients do not meet their treatment goals on just these medications.

At this point, your doctor may turn to other traditional or newer biologic DMARDS to help control your RA. With the addition of this class of drugs, most patients can control their disease and reach remission.

In fact, recent clinical trials have shown that combining a traditional DMARD and a biologic DMARD early in the disease is more effective than one of these drugs alone. DMARDs have a very good chance of controlling your disease, especially when used within the first few months after you get diagnosed with RA.

What to Know Before Starting DMARDs

Your doctor will choose which DMARD will work best for you depending on how long you have had RA, how severe your disease is and how they think the side effects will affect you. Prior to starting DMARDs, your doctor will ask you to get blood work, including a test for tuberculosis.

For patients who have a silent tuberculosis infection, this class of medication can cause the infection to become

symptomatic.
Side effects are an important topic to talk to your doctor about before starting a DMARD. These drugs can have serious side effects, which will require you to have frequent blood tests while taking them.

The most common side effects of these types of medication are an increased risk of infection since they work by slowing down your immune system.

Common DMARDs Doctors Prescribe

Methotrexate

This is the most commonly prescribed DMARD. It is so popular due to its low cost and safety.

Rash is one of the most common side effects, which can be helped by taking folic acid along with the methotrexate. It can also lead to liver or bone marrow damage, and you will need regular blood work when taking methotrexate.

Leflunomide (Arava) works very similarly to methotrexate and is about as effective. Like methotrexate, leflunomide causes birth defects and women taking either of these medications need to be careful to use birth control while taking these medications.

Sulfasalazine (Azulfidine) and Hydroxychloroquine (Plaquenil)

These are also traditional DMARDS and are used for mild RA. Side effects include some problems with your heart or eyes when taking these, especially hydroxychloroquine.

Tumor Necrosis Factor (TNF)

These drugs are a type of biologics that blocks TNF, which is a key player in the inflammation that causes pain and joint damage in RA. These include adalimumab (Humira), etanercept (Enbrel), and infliximab (Remicade).

When taking these types of drugs, you may be more likely to get an upper respiratory infection or urinary tract infection and may have pain where you give yourself the injection.

Tocilizumab (Actemra)

In RA, your body produces high levels of interleukin, which is a chemical that works in the body to increase inflammation. Normally, this helps your body fight infection and repair any damage, but in RA, this increase in interleukin adds to joint damage and pain.

Certain biologics work by decreasing the amount of interleukin made by your body and have been shown to improve RA disease. An example of these types of drugs include tocilizumab (Actemra), which has been shown to affect your liver and cholesterol, as well as increase risk of infection.

Abatacept (Orencia)

This is an example of a T-cell inhibitor biologic, which helps to decrease your body’s immune response and is used when your RA is moderate to severe. Since it works by decreasing your immune system, when you take these types of medications you are more likely to get infections.

B cells, a different cell that helps your body’s immune system, are targeted by biologics to help treat RA. An example of this type of drug is rituximab (Truxima).

Other Options

A third class of DMARDS include targeted medications, including janus kinase (JAK) inhibitors, such as tofacitinib (Xeljanz), baricitinib (Olumiant) and upadacitinab (Rinvoq). This group of DMARDS have been found to work well in helping control RA, like other types of DMARDS.

Final Notes

DMARDs are a great option for patients with RA, especially those who have been recently diagnosed. They provide hope for patients with RA when treated early in the disease with these powerful medications.