Rheumatoid arthritis remains an incurable, autoimmune disease that affects more than two million Americans. However, new drugs may ease the chronic pain of this disease.

**Keywords**

Arthritis, Osteoarthritis, Rheumatoid Arthritis, Immune System, Joints, X-Ray, Deformation, Stiffness, Swelling, Cells, Chemicals

**Citation**

Easing the Pain of Rheumatoid Arthritis

BRIAN WILLIAMS, anchor:
We're back. Time now for our series MEDICAL MYSTERIES, zeroing in on illnesses that seem to strike women more than men. Unlike the more common osteoarthritis, rheumatoid arthritis is caused by a problem with the immune system. As NBC News chief science correspondent Robert Bazell tells us, the treatment picture is changing.

ROBERT BAZELL reporting:
For Jen Li, it started in one finger 11 years ago.
Ms. JEN LI: It became swollen and swollen, little by little. And--until literally I couldn't bear the pain.
BAZELL: She has rheumatoid arthritis, where the body's immune system attacks and destroys the joints. More than two million Americans suffer RA, 70 percent of them women.
Dr. MARK GENOVESE: That bother you?
Ms. LINDA COPP: No.
BAZELL: Untreated, it usually gets worse, often leading to the kind of deformity Dr. Mark Genovese of Stanford shows with X-rays.
This is about as painful and deformed as it can get.
Dr. GENOVESE: It is. This patient probably has very little function and profound degree of pain, stiffness and swelling.
The reality is that doesn't need to be the outcome now for a patient who develops rheumatoid arthritis in the 21st century.
Well, I think you look great. So I think it's OK if we go ahead and give you your next round of your--of the medication today.
BAZELL: The new hope comes from several drugs on the market that target specific parts of the immune system that cause RA. Every drug does not work for every patient, and they can have serious side effects.
Unidentified Woman: You can go ahead and relax your arm.
BAZELL: But more drugs are in clinical trials, like the one Linda Copp says diminished her pain.
How long after your first treatment did you notice any effect?
Ms. COPP: I was right after the treatment, then we realized that I was on the right stuff.

BAZELL: The right stuff comes from basic research into the very complex interaction of cells and body chemicals that make up the immune system.

Dr. GENOVESE: We have a very good understanding of what happens when the immune system does become deviated. But we don't necessarily understand why it happened. If we could, not only would we be able to treat these diseases, but we'd be able to cure them.

BAZELL: But short of a cure, the drugs are allowing more and more patients like Jen Li, who had been disabled by rheumatoid arthritis, to lead a normal life. Robert Bazell, NBC News, Palo Alto, California.