

Rheumatoid Arthritis



X-ray showing severe joint destruction



Pre-operative deformity



Intraoperative joint replacement

As I sat across the examination table from this dear woman with severe disfiguring rheumatoid arthritic hand deformities, she began to tell me about her disease. She kept her head down barely making eye contact. She spoke slowly and softly, "Doctor, my hands aren't much use to me any more. I can barely hold a spoon to feed myself. It takes me a long time to get dressed. I'm afraid soon I won't be able to button buttons and I may have to move in with my children or somewhere else. They hurt me too." She was depressed, and ashamed of the appearance of her hands. Even worse she seemed hopeless fearing the loss of her independence.

After reconstructive joint replacement performed as an outpatient the once crippled hand worked again. Three weeks after surgery she hardly seemed like the same woman. She was bright, cheerful and assertive. For the first time in

many years she wore makeup applied with her "new hand". She looked me in the eye and spoke from the heart, "Doctor just look at my hand! Doesn't it look great? I can use it again doctor just like I did years ago before arthritis. I'm ready for you to fix the other one if you would. Can we go ahead and fix it now?" Four weeks after the first hand was reconstructed I put

new joints in the other hand. Now they match. My patient said, "Until someone sent me here I had no idea anything like this was even possible. I kept hearing 'nothing could be done;' I didn't even know there was such a thing as a hand surgeon. I'm so thankful!"

Truly, reconstructing a crippled, functionless rheumatoid hand is one of the most gratifying experiences I have as a hand surgeon. The change in hand function and appearance is paralleled by the overall change in the person. The depression often goes away. The hands are no longer despised and kept hidden from view out of embarrassment. The joy, happiness, and confidence exudes as the patient feels they have a "new lease on life."



before joint replacement

after joint replacement

Carpal tunnel syndrome and trigger finger occur quite commonly in association with rheumatoid disease. Classically, rheumatoid arthritis affects the wrist and metacarpal

phalangeal joints initially. Other changes are secondary.

Medical treatment is the mainstay of therapy for rheumatoid arthritis however ideally the patient with rheumatoid arthritis should be followed by the rheumatologist and the hand surgeon. In so doing, changes in the hand can be addressed early on (often by

Rheumatoid Arthritis continued

therapy and night splinting only), thereby maximizing function of the hand and avoiding rapid, predictable changes in hand kinematics that occur if the hand is neglected.

Rheumatoid arthritis is an auto-immune disorder which causes inflammatory changes and edema in joint synovium. Resultant synovitis causes cartilage and relative local ischemia as bulk increases. As changes occur in the cartilage and collateral ligaments, the joint begins to sublux and the intrinsic and extrinsic extensors and the flexors become imbalanced (subtle changes initially). As the disease progresses, there is ulnar drift at the metacarpal phalangeal joints as well as swan-neck and boutonniere deformities. Tendons become more



pre-operative appearance



immediately post-op
joint replacement

lax. Sharp bony prominences at the distal ulna often cause tendon rupture.

As soon as the diagnosis of rheumatoid arthritis is made I would hope the patient comes in for evaluation and consultation. The goal of treatment is to preserve function in the wrist and hand and help eliminate pain. Appropriate custom-made radial deviation splints should be made and used during flare-ups to make the patient's own joints last longer. If eventually marked synovitis does not go away despite appropriate medication prescribed by the rheumatologist, limited surgical removal of the tissue may prevent tendon rupture. Joint synovectomy likewise may preserve joint function delaying the need for total joint replacement. If needed however total joint replacement with today's advanced implants and our highly refined techniques can be life-changing. Cosmetic changes while secondary to function are remarkable and appreciated.



early range of motion

A Personal Note

For me, being a hand surgeon has been an absolute joy. People placed their trust in me, I did what the Good Lord gave me the ability to do and the patients pour out their appreciation which goes straight to my heart.

This is especially poignant when correcting a child's deformed hand that will be used for a lifetime as well as when we restore function to a rheumatoid patient's deformed hand that has been used for a lifetime.

We make a personal invitation to anyone with crippling rheumatoid disease...let the doctors at The Hand Center help you. We don't want you to live with hands whose use has been stolen by the ravages of rheumatoid arthritis leaving you barely able to care for yourself. No one should have to live that way if correction is possible.

*For the The Hand Center doctors,
Michael G. Brown, MD, Founder*