Can Arthritis Be Cured?

By Thomas J. Haverbush, M.D.
Orthopaedic Surgeon

Transforming patient information into patient understanding.

Today’s article is being written based on some recent reading and a visit to the Basic Science Research Building at the University of Michigan where our daughter is on the staff.

The onset and progression of joint disease, in this case osteoarthritis, are extraordinarily more complicated than most people realize. Why? Because the joint must be considered as an integrated whole rather than the sum of its parts.

For a healthy joint to work properly requires the joint to integrate the function of many tissues. They are bone of course, cartilage, synovium, nerves, blood vessels and others.

Orthopaedic research refers to this as “crosstalk” or the interaction of all of these tissues.

When the crosstalk between these tissues is interrupted joint disease leading to osteoarthritis develops.

Our understanding of how all of these interactions work is in a very preliminary stage. But it is progressing.

Bone and Cartilage

Bone and the cartilage that covers the ends of the bone in the joint are what most people know about the joint. What they don’t know is that besides allowing the joint to move there is a very complex signaling among the cells of many tissues across the joint.

Beyond Bone and Cartilage

Osteoarthritis is usually defined as the wear and tear changes in the cartilage and bone and wearing down of the joint space. This results in pain and stiffness. It is more correct to consider the joint as an organ.

Also affected are synovial joint lining, joint fluid, ligaments, tendons and surrounding muscles. But wait, there is more. Diabetes, overweight and aging affect the joint also.

Vascular Changes

Joint health depends on proper blood supply to the bone. In some conditions there is decreased blood going to the bone and therefore reduced oxygen. This can lead to avascular changes in the bone leading to bone weakness and collapse.

New tissue engineering will allow new approaches in the diagnosis and treatment of joint disease.

Horizon

As research advances our understanding of how arthritis happens, the treatment of arthritis will change too. In the future the treatment we use now such as total joint replacement will be as outmoded as a black and white 10 inch TV. Has anyone seen one of those lately? Everything we now use to treat arthritis will disappear and be replaced.

Orthopaedic Surgery practice in the future will be exciting for the surgeon and the patient.

Therefore the answer to the title of this article is yes arthritis will be cured in the future, but “curing” arthritis is tremendously more complicated than most patients know. It will undoubtedly take many more years.

My patients put their trust in me and what I do improves the quality of their lives.
Office Website and Gratiot County Herald Archive

Thank you loyal readers for joining us each week. Do yourself a favor and log onto www.orthopodsurgeon.com.

It contains a world of musculoskeletal information you and your family and friends can use! Website, Your Orthopaedic Connection, Archive of all previous GCH articles.
Please check it out. Be well.
Good health, good life, all the best to you.

Dr. Haverbush