Arthritis is one of the most common medical disorders in the U.S. affecting 1 in 7 Americans. There are more than a hundred forms of arthritis. For example, Lyme disease is an arthritic illness that can strike anyone bitten by a carrier tick. Lupus, a chronic immune system disorder, is also an arthritic related condition that primarily affects young women.

A common denominator for most types of arthritis is pain and stiffness in and around the joints. Pain may result from inflammation of joint tissues or breakdown of joint cartilage. Because there are so many types of arthritis and arthritis-related causes vary widely or are unknown.

Common types of arthritis:

Osteoarthritis (osteo - bone, arthr - joint, itis - inflammation) aka degenerative arthritis or degenerative joint disease. Rarely found in people under 45, it is caused by the erosion of cartilage, the spongy tissue at the tips of bones (functioning as shock absorbers). As the cartilage thins, bone rubs on bone; joint deformity, stiffness and pain usually result. Those at higher risk for osteoarthritis: people who have previously injured or overused specific joints or who have a family history of osteoarthritis.

Rheumatoid arthritis: more than two-thirds of those affected are women. Unlike osteoarthritis, rheumatoid arthritis is an auto-immune related disease. It can strike at any age, causing inflammation and swelling of the tissue lining the joints as well as fatigue. It can affect joints throughout the body as well as the skin, lungs or eyes. Since chronic inflammation may damage cartilage and bone, the illness can assume crippling proportions.

Rheumatologists are specialist who treat joint diseases (rheumy means watery).

Gout or gouty arthritis affects about a million Americans, most of them men. It can strike suddenly, causing violent pain and swelling frequently centered, for unknown reasons, in the joint of the big toe. Overeating and heavy drinking are linked to this condition. A build up in the blood of a waste product called uric acid (crystals of uric acid filter into a joint and inflame it) can trigger attacks.

Fibromyalgia (fibro - fiber; my - muscle - algia - pain): this arthritis-related disease is marked by widespread pain, along with fatigue, insomnia, stiffness and sometimes psychological distress. Unlike other forms of arthritis, however, patients don't show evidence of inflammation, joint or muscle degeneration. Primarily affects women.

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1 Abstracted from Modern Maturity, Sept/Oct 1995
Ankylosing spondylitis (ankylo - crooked, bent stiff; spondyl - vertebrae): usually affects younger men. It is a spinal inflammation that can spread throughout the body. Frequently the end result is total fusion of the spinal column.

SPECIALISTS:
othopedists ortho means straight; ped means child; ist means specialist
rheumatologists specialist who treats joint diseases (rheumy meaning watery) joint diseases like arthritis are characterized by swelling of the joints
osteopath separate school of medicine (O.D. vs MS). ODs are recognized as same as MDs.
chiropractor chiro means hand; manipulates spinal column (not medical doctors, but technicians)

Carpal Tunnel Syndrome
Although CTS was first described by Paget in 1954, it has only been recently that this disorder has gotten the attention of the public. It has become one of the most debilitating disorders to affect American workers in decades. CTS has become a major work expense, costing employers anywhere from $8900 to $24,380 per claim. Increased computer use and more specific job tasks are primary contributors to the CTS epidemic. A number of risk factors for CTS have been identified. These include: awkward wrist positioning while using hand-held tools; repetitive forceful grasping; awkward wrist motions and repetitive tasks such as typing or small parts assembly; stressors such as pacing, production quotas and difficulty relating to co-workers and supervisors.

On initial examination, the mechanics of CTS appear well-defined. The median nerve is compressed within the carpal tunnel space by scar tissue formation and/or swelling of the tissues. As a result, the patient experiences numbness and tingling in the hands and/or fingers.

When the compressed nerve causes slowing of nerve conduction through the carpal tunnel space, surgery to release the entrapment is the intervention of choice. This nerve conduction slowing is typically diagnosed through electromyography (EMG). But patients with symptoms characteristic of CTS - numbness and tingling in the distribution of the median nerve - often produce negative neurodiagnostic findings. Despite this, some of these cases are referred for surgery because of the belief that EMG testing may not be sensitive enough to detect the compression.

Treatment: Some patients experience immediate relief post-surgically, while some notice a reduction in distal complaints but an increase in proximal symptoms. Others, however, experience no benefit from surgery. The workstation should be evaluated and adjusted to create a more ergonomic setting, and the physiologic risk factors inherent in operator use should be examined. Job modification or work-rest cycles may need to be considered. Splints or other ergonomic devices should also be considered on an individual basis.

Today's more specific job tasks can result in muscle overload fatigue. Dysfunctional movement patterns develop when tasks are repeated. Compensatory movement often begins with muscles that vary least in movement and task demand. Employees who cannot perform continuous static or repetitive work are often unemployable, which adds significantly to the cost of claims.
HIP RE Replacement VS HIS RESURFACING:

<table>
<thead>
<tr>
<th>HIP RESURFACING</th>
<th>HIP REPLACEMENT</th>
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<tbody>
<tr>
<td>Preserves the femoral head and neck; uses a bigger ball reducing the chance of dislocation</td>
<td>Removes the femoral head and neck</td>
</tr>
<tr>
<td>Preserves the femoral canal</td>
<td>Hollows out the top of the thighbone and drives a stem deep into the femoral canal</td>
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<tr>
<td>Average age of patients is under 50</td>
<td>Average age of patients is 68</td>
</tr>
<tr>
<td>Recovery time: 6 weeks to 3 months</td>
<td>Recovery time: 3 to 6 months</td>
</tr>
<tr>
<td>Cost: approximately $25,000</td>
<td>Cost: approximately $25,000</td>
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Resurfacing emerged in the 1970’s, but fell out of favor because of problems with the polyethylene parts used at the time. FDA-approved clinical trials began about 4 years ago and 2000 resurfacing procedures have been done. Canadian and European surgeons have been using this technique much longer, and some U.S. citizens have traveled to other countries to have the procedure done.

At this time, there is insufficient data that resurfacing has greater functional capacity than up-to-date replacement.

2 AARP Bulletin, October 2004, p. 30-31
SKIN
CHAPTER 16

Focus on burns, cancers

EXERCISES: H, J, M, and N

Immunotherapy:
More than a thousand patients since 1985, patients who have been treated for advanced malignant melanoma, have received experimental cancer vaccines that are under development. A handful of these patients (approximately 1 in 5) have responded spectacularly to the treatment. Deliberate manipulation of the immune system utilizes its special abilities to identify and eliminate disease. White blood cells, primarily T cells (so named because they receive their education in the thymus) seem particularly adept at spotting unique molecular landmarks known as antigens on the surface of cells and then rallying the immune system to identify and destroy cells with the same telltale markings wherever they appear. Cancer vaccines seem to stimulate T cells to attack cancer cells, which research indicates have surface markings that differ ever so slightly from those or normal cells.

Interest in these biological approaches is by default: conventional cancer treatments like radiation and chemotherapy cure relatively few people, and have a high cost in terms of toxic side effects.

Malignant melanoma has been increasing faster than any other cancer in the world, and it's now apparent that except for a few exceedingly rare cancers (most notably childhood leukemia and testicular cancer), chemotherapy often does little more than briefly extend survival. Although the response rate from immunotherapy has consistently remained at about 20%, the minimal side effects has allowed patients to resume challenging occupations. In addition, vaccines are also being tested against colon, breast, and ovarian cancers, and a second generation of more sophisticated vaccines are now coming into use.
Must-Know Facts about Moles

Difference between a freckle or an age spot from a mole:
Moles can be raised or flat, maintain their color, and can appear anywhere on the body and in a random pattern.

Changes in moles are important to monitor because melanoma originates in the pigment producing cells. It’s not known just how melanoma begins or why certain moles go bad.

There’s a cluster of changes in moles, any of which may be the first you notice. Go by the ABCDs: asymmetry (one side doesn’t match the other), borders (irregular, ragged edges), color (any changes in color or uneven coloring), and diameter (a mole that’s wider than a pencil eraser).

Any of these changes plus itchiness, bleeding, oozing should be brought to your doctor’s attention. A biopsy will be done by a dermatologist and the suspicious tissue will be examined by a pathologist. To reduce unnecessary biopsies, some doctors use a dermascope, a high-powered, hand-held microscope that can “see” into a mole.

Melanoma can occur anywhere on the body, even places not exposed to the sun (like between toes). African-Americans are more likely than Caucasians to get melanomas on the palms of their hands, soles of the feet, and fingernail beds.

Flat moles are more likely to give rise to melanomas, while hair-sprouting moles are less likely to mutate. The majority of moles are genetic so there’s no way of preventing them although a small number may be associated with sun exposure.

A person with a first-degree family history of melanomas raises the risk as does exposure to the sun. Having more than 50 moles and/or moles larger than a pencil eraser in diameter, exhibiting dysplastic nevi (benign moles that are large, with irregular borders or colors) or being born with moles also raises risk.