

**Rheumors**  
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**POINTS ON JOINTS**

By Norman S. Koval, M.D.

**FOREIGN BODY INDUCED JOINT INFLAMMATION**

The penetration of a foreign body into a joint, tendon sheath or the soft tissue surrounding the joint may cause a single joint (monoarticular) synovitis. Synovitis is the inflammation of the lining of a joint or tendon. The foreign bodies most commonly described in association with this inflammation include different plant thorns, wood splinters, and sea urchin spines. All of these may easily break inside a joint cavity causing inflammation. Other less frequently found agents for foreign body synovitis are fish bones, silica, silicon, metals, plastics, rubber, glass or gravel.

Patients with silicon or metallic prostheses (artificial joints) may develop synovitis due to the breakdown of the component parts, with small slivers inciting the inflammation.

Lead may also cause a synovitis following penetration of a projectile into a joint or as part of the systemic manifestations of lead poisoning. The common mechanism is based on the fact that synovial fluid can act as a solvent for lead.

The joints most commonly involved are those unprotected by clothing. There may be variable degrees of joint swelling, thickening of the lining of the joint and the development of an effusion (accumulation of fluid in the joint). On occasion, patients with foreign body synovitis due to sea urchin spines or other foreign bodies of animal origin present with fever, muscle aches (myalgias), swelling of regional lymph nodes, and synovitis of surrounding joints. Professional diving, other marine recreational activities, and gardening are well-recognized risk factors.

The attending physician must consider other causes of acute and chronic single joint inflammation as well as different types of total finger inflammation such as a erysipeloid, typical and atypical mycobacteria, sarcoidosis, as well as psoriasis. The latter two diagnoses have been discussed in prior installments of Rheumors.

Laboratory studies may show synovial fluid that is cloudy or bloody and have white counts that are in the inflammatory range between 10,000/60,000 cells per cubic millimeter. Inflammatory white cells predominate. Cultures for bacteria and fungi are negative except when an infectious agent has been introduced along with the foreign body. Fresh preparations of synovial fluid occasionally may reveal fragments of plant thorns, plastic, dark metallic particles, or needle shaped fiberglass.

X-ray studies detect only those foreign bodies that are radiodense such as metal, fish bone and sea urchin spines, and usually miss wood, plastic and plant thorns.

Treatment of foreign body synovitis: Approximately 30% of patients with a foreign body synovitis will resolve spontaneously. The remaining patients require surgical intervention. After the surgical removal of the foreign bodies, a few patients may experience recurrent joint swelling, as well as new bone formation.

## LEAD ARTICLE

### **HEALTH CARE REFORM, A PATIENT PRIMER**

by Robert L. Rosenberg, M.D.

The 1992 Presidential election placed the issue of health care reform in sharp national focus. Candidate, and now President, Bill Clinton, rode the wave of dissatisfaction with our current health care system to the White House. We are at a critical juncture with health care reform no longer just a possibility, but a pending reality. On May 3, 1993, the 526 member White House Health Reform Task Force will submit its findings to Congress and the public. The future they present will both excite and scare us all.

Few will argue that health care costs are increasing too rapidly. Currently, 14% of the gross domestic product, or 1/7th of our entire economy, is devoted to health care. Adding to this problem, 37 million Americans are without health care coverage. Those with coverage are often locked into their jobs because of inability to carry their benefits with them when they seek other jobs, self-employment, or retirement. Bankrupt firms leave behind unemployed and uninsured workers. Hospitals, doctors, and other health care providers often suffer too by providing uncompensated or undercompensated care. Anyone who has seen their health care costs rise by 10% to 20% annually, knows the impact of this problem first hand. Is this a crisis? More to the point, it is a chronic problem recognized by the medical community for the last twenty years. Health care costs have been a major topic of discussion by physicians since the 1970's and my medical insurance was then only \$400 per year! The political atmosphere, the accelerated growth of costs and the overwhelming budget deficits all have lead political Washington to discover this "new" twenty year old problem.

It is clear that medical costs have grown tremendously, but the reasons are numerous. New technology and new pharmaceuticals have saved and prolonged lives. The added burden of HIV related disease, drug, cigarette and alcohol related diseases, and an aging population, all require more and more complex care. Patients with end-stage renal and heart disease are able to survive for years with organ transplants that were science fiction a few generations ago. Technologies not even dreamed of 20 years ago are common today - laser surgery, laparoscopic surgery, coronary artery by-pass surgery, immune and genetic manipulation, and new imaging techniques. Also, the public has demanded and received payment for allied and alternative health care including massage therapy, chiropractic therapy, herbalist therapy, nutritional therapy, holistic medicine and others. They all share in increasing our medical care costs whether or not you as a consumer use them individually.

Where can we improve? For a start, we can improve with preventative care. Weight control, exercise, smoking cessation, reduction of alcohol consumption, childhood immunizations, prenatal care, and cholesterol and cancer screening are essential. We need a system that encourages and pays for these efforts.

The Health Care Task Force recommendations will likely support a form of "managed

competition", a much touted but little understood concept. Managed competition supports a system of guaranteed basic health coverage contracted for by groups of large and small employers who can negotiate as a group to get the best possible price for health care services, usually through a managed care operation. The managed care operation may consist of any of one of a group of alphabet soup designations (HMO, PPO, IPA) that offers basic medical services at an agreed upon contract price. By buying coverage in large groups, costs presumably can be kept low while preserving access to health care. Unfortunately, an emphasis on delivery of "quality" health care is missing.

Advocates of a single payer system point to our northern neighbor Canada as a model. In Canada the government is the single payer and administers all health care. While many Canadians speak highly of their health care system, many other Canadians seek health care in the USA on a fee for service basis. Currently the Canadian system, like ours, is experiencing an explosion in costs, though the magnitude of their cost rise is not as great as ours.

Regardless of how you feel about the current system, there are some basic truths. Eighty percent of Americans want a change in the health care system and most physicians agree. The changes will affect all of us. Our new system will initially be more disruptive and probably more expensive with the hope that costs can be kept in line in later years. Access to your family doctor may be sacrificed and your choice of physician will be limited. Medical care will likely no longer be "on demand". Everything that we do as physicians will come under increased scrutiny, often by non-physicians. We will all face these major changes together with the goal of providing the best quality care available anywhere.

As patients and health care consumers, you must be informed and involved in the decision process. Please write or call your representatives and tell them what you think about health care reform. Arthritis & Rheumatism Associates wants to provide the best health care available under any system.

## **RHEUMINATIONS**

### **KEEP IN TOUCH WITH YOUR REPRESENTATIVES**

#### **KEY TELEPHONE NUMBERS AND ADDRESSES**

Senate and House Bill Status.....202-225-1772

#### **Senate Addresses**

Street addresses in Washington, DC 20510

SD ... Dirksen Building .....1st & C Sts., NE  
SH ... Hart Building.....2nd & C Sts., NE  
SR ... Russell Building.....1st & C Sts., NE  
S.... Capitol Building

#### **House Addresses**

Street addresses in Washington, DC 20515

Rooms listed with 3 numbers:

CHOB..... Cannon House Office Bldg.  
..... 1st St. & Independence Ave., SE

Rooms listed with 4 numbers beginning with 1:

LHOB..... Longworth House Office Bldg.  
..... Independence & New Jersey Aves., SE

Rooms listed with 4 numbers beginning with 2:

RHOB..... Rayburn House Office Bldg.  
..... Independence Ave. & S. Capitol St., SW

Other office buildings:

OHOB (O'Neill)..... New Jersey Ave. & C St., SE  
FHOB (Ford)..... 300 D St., SW  
H ..... Capitol Building

WHEN WRITING, these addresses and salutations are suggested:

The Honorable John Doe

The United States Senate  
Washington, DC 20510

Dear Senator Doe:

The Honorable Jane Doe  
U.S. House of Representatives  
Washington, DC 20515

Dear Congresswoman Doe:

TO PHONE Senate and Representative offices directly, dial 202 and the telephone number shown below, opposite the members names.

### **Senators**

Sen. Paul S. Sarbanes (D)  
SH-309                      202-224-4524  
3rd Term Expires..... 1995

Sen. Barbara A. Mikulski (D)  
SH-320                      202-224-4654  
2nd Term Expires..... 1999

### **House of Representatives**

Wayne Gilchrest (R - 1st)  
412 CHOB    202-225-5311  
2nd Term

Helen Delich Bently (R - 2nd)  
1610 LHOB    202-225-3061  
5th Term

Benjamin L. Cardin (D - 3rd)  
227 CHOB    202-225-4016  
4th Term

Albert Wynn (D - 4th)  
423 CHOB    202-225-8699

1st Term

Steny H. Hoyer (D - 5th)  
1705 LHOB 202-225-4131  
7th Term

Roscoe Bartlett (R - 6th)  
312 CHOB 202-225-2721  
1st Term

Kweisi Mfume (D - 7th)  
2419 RHOB 202-225-4741  
4th Term

Constance A. Morella (R - 8th)  
223 CHOB 202-225-5341  
4th Term

## **QUESTION & ANSWERS**

By Evan L. Siegel, M.D.

Q.

I recently saw a report on television about a new therapy for arthritis called pulsed electromagnetic field therapy. Is this really an effective treatment for arthritis?

A.

Recently several reports in the media have focused on this new, potentially beneficial therapy for Osteoarthritis. These reports were based on a pilot study of 25 patients, of whom 14 were treated with exposure to Extremely Low Frequency pulsed magnetic fields, and 11 were treated with a sham procedure (no therapy, disguised to appear as if magnetic pulses were being generated). Benefit was modest in the treated group, with one-quarter to one-half showing improvement in some symptoms. The patients treated with the sham procedure also showed some benefit.

It is much too early to draw any conclusions from such preliminary data based on so few patients.

While some scientific studies based on animal and test tube models exist which would suggest a beneficial effect of biomagnetic energy on bone and cartilage repair, there are no well controlled studies on human tissue or on sufficient numbers of patients to make any well informed recommendation. At this time, this type of experimental treatment should be restricted only to patients participating in a study protocol.

Q.

My doctor recommended a series of joint x-rays. Will this amount of radiation harm me?

A.

No. The radiation used in diagnostic x-rays is very minimal. The main danger of x-radiation is to the genetic code of cells that are growing and reproducing. Tissues such as bone and cartilage, which make up the joint, reproduce very slowly. This makes them fairly resistant to any damage from radiation. Even tissues with more rapid cell turnover and growth, such as skin, are resistant to the minimal total radiation dose received from even extensive diagnostic studies. Of course, very rapidly dividing cells, such as those in a developing fetus, theoretically could be damaged which is why x-ray studies are avoided, if at all possible, during pregnancy. However, millions of x-rays are taken on a daily basis in this country alone and there have been no reports of serious short or long term adverse events as a result of the careful and thoughtful use of x-radiation for medical diagnostic imaging.

## **THE FUN RHEUM**

JOINT JEOPARDY

T	I	C	K		R	H	E	U	M	A	T	O	L	O	G	I	S	T
A	B						C						Y		O			
B	U	R	S	A		B	O	N	E				M		L	B	S	
	P			I			T			C	U	R	E		D	R	U	G
	R		U	L	C	E	R					A				A	N	A
D	O	C					I	L	L							C		I
	F			R	A	Y	N	A	U	D			F		H	E	A	T
	E								P	R	A	Y	E	R		L		
A	N	A			S						U		V			E		
C			E	X	E	R	C	I	S	E			E		M	T	X	
H					X			C		S			R					
E						S	L	E	E	P								

ACROSS

1. Carries agent causing Lyme Disease
3. Joint Doctor
7. Antibody (Abbrev.)
8. Inflamed in bursitis
9. Hardest tissue
10. Pounds (Abbrev.)
13. Goal of arthritis research
15. Medication
17. Peptic \_\_\_\_\_
18. Anti-Nuclear antibody (Abbrev.)
19. What's up \_\_\_\_\_?
20. Sick (Syn)
22. Cold white fingers named after him
25. Appy \_\_\_\_\_ first to painful back
26. Always useful in addition to treatment
27. Same as 18
29. Should be balanced with rest
32. Methotrexate (Abbrev.)
33. If deep, the best muscle relaxer

DOWN

1. Tablet (Abbrev.)
2. Contained in Advil, Nuprin, Motrin
4. Preferred coated aspirin
5. Ticked Connecticut town
6. Not all that glitters in therapy
11. Copper \_\_\_\_\_ may help and won't hurt
12. Bright rays cause lupus flare
14. Rheumatoid arthritis (Abbrev.)
16. "Medical" for your walk
21. Rheumatic for wolf
23. Physician title
24. High temperature
27. Paired with pain
28. Where there's a will there's a way!
30. Cold, opposite of 25 across
31. Extra sensory perception



