

Highlights of the Fall Symposium on Back Pain

Robert Anderson, DC,MD,PhD

The American Back Society hosted over 1,000 attendees in San Francisco in December, 1991. A distinguished faculty accomplished another outstanding job in their state-of-the-art presentations. New events were introduced including: Spinal Orthoses, Mastering Effective Communication, Surgical Neuromonitoring, San Francisco Spine Center, Foot Problems Relating to Back Pain, and Chronic Spinal Pain Support Group Workshops. Courses on the Cyriax Approach to Neck and Back Pain, Spinal Manipulation, Chiropractic Research, Isokinetics for Orthopedics, Sports, and Industrial Rehabilitation were also added. Our Surgical Bioskills Laboratory included the Texas Scottish Right Hospital, Coutrel-Dubousset, and other newer spinal fixation instrumentation devices.

The following are highlights of some outstanding presentations from our recent meeting:

William H. Kirkaldy-Willis, M.A., M.D., FRCS (C&E)

"The most important thing is to prevent the recurrence of these marked changes of fibrosis in muscles and joints. Early treatment for an injury, early vigorous education of the patient, early activities, and perhaps most important of all, early return to work."

Anne Tramposh, M.S., P.T.

"The biggest fear to return to work, other than the physical barriers, is the communication barrier. I can't tell you how many times I've seen patients whose only problem was no one was talking to them. He didn't know what was going on, his employer didn't know what was going on, his insurance company didn't know what was going on, and nobody was talking to each other.

"Communications can probably be the biggest barrier that we see. Particularly, in the workers' compensation system, you have an automatic tendency for it to become an adversarial situation. Whether or not the employer was at fault, you have a 'me against the company' sort of thing.

"When you have an adversarial situation, you're going to erect communication barriers. One way we can prevent them is to communicate and let that patients know what is wrong with them, when something is wrong with them. Let them know what we're thinking at all stages of the game. Let the employer know, encourage him to keep in contact with the employer, and to talk with the insurance company."

Philip E. Greenman, D.O., FAAO

"I classify manipulative intervention in three different categories. One is the acute patient. In that instance, you see them frequently and short term. If you are not getting anywhere in 30 days, then you'd better do something differently. Maybe see them two or three times a week, for two to four weeks in an acute case, and if manipulation is going to work, it's going to work in that period of time. If you're four weeks out and still not getting anywhere, then you'd better change your treatment plan.

"Second, are the chronics -- how ever you define chronics -- and that can start anywhere around 90 days to six months, and clearly if they are a year out or better. In those instances, treat them very intensively but not too frequently -- once a week. If you can't see a change in three months, forget it, as you are not going to get there. That's the world I live in. I can get maximum biomechanical function in three months on most people, with five to six visits over that period of time.

"The third one you have is the chronic recurrent. That's a different ball game. Those are people that I call maintenance therapy types. They've had some injury, surgery, developmental variation of occupation, or some such things that periodically need attention. A couple of treatments every three months certainly are justified in those kinds of people to prevent progression and to maintain comfort. That's a good medical principle. It's no different than taking care of one of your patients with diabetes. You want to see them periodically. You can give them only so many doses of insulin and stop, and they don't come back again -- no! You monitor them regularly, the same way as with hypertension. Good medicine says that in chronic, irreversible conditions, maintenance therapy is appropriate. We don't prescribe manipulation in that context enough, and I think we should. So that's how I classify them.

"It must be done in a total patient context, and too many times we see patients who have had a lot of intense work in one area but not looked at in a comprehensive fashion. I think that we all fall into the trap that we have our own ideas of what the cause of the patient's back pain is, and therefore there must be a treatment that we can do for that; so we get ourselves wound up in a search and destroy mission for the pathology that we seem to think is most useful to us.

"Walking is the best exercise we have found, both from the biomechanical perspective, as well as reconditioning perspective, and for our length and strength of lower extremity muscles. They must do it in a cross-pattern fashion, they must have a long stride, and they must push it to a minimum of 20 minutes as an aerobic program. Everybody can find a place to walk.

"They all walk a lot, but they never walk as exercise. We're talking about walking as an exercise program. Proprioceptive balance, sensorimotor training. That is the key. If you don't have this, I am firmly convinced that you will never be able to rehabilitate your patient. I am now to the point where I'm prepared to say that 100 percent of our failed backs have lost this. They all get sensorimotor retaining and exercise. Try it, you'll like it."

Terry R. Yochum, D.C., DACBR, FICC

"The pseudotumor appearance is defined as a contralateral pedicular sclerosis opposite a unilateral pars defect, the Wilkenson syndrome. If there's deficiency in the arch, there's transference of weight-bearing to the opposite side of the arch and clinical hypertrophy will occur. That radiographically may be presented to us as sclerosis and enlargement.

"Seeing it on CAT scan and correlating the specimen study, we see the defect, we see a laying down of new bone on the side opposite the defect."

Arthur H. White, M.D.

"If you do all that Greenman and McKenzie were showing you, you can get 90 percent of otherwise operated herniated disc patients better with aggressive conservative care, not psychological care, not work hardening, but just plain good physical exercise. You are not a helpless pawn of your condition. You can be trained to manage your condition: stabilization training; balance of the neutral spine; restoration with segments mobility; dynamic muscular control; appropriate use of stabilization; all are just variations of what we've heard in the last two talks.

"The stabilization that people use is the neutral position, which is the pain with balance position. As Bill Kirkaldy-Willis has shown us in his slides, if you take a patient with lateral recessed stenosis and rotate it or extend it with two black lines coming together, the nerve root that's between there gets impinged, it gets swollen, it gets edematous, and you have leg pain. Don't do that. Learn how to keep your spine in a neutral balance position, a painless free position with the use of your musculature. Use the stabilization training programs with which each patient can exercise in extension and flexion. Take your choice. Find out what works and do it."

Lawrence Elson, Ph.D.

"Despite involving forces insufficient to cause tissue injury, many low velocity collisions and occupational accidents result in pain and sometimes disability, and costs going into six figures. This is on a 3-4 mph rear-ender.

"It is proposed that the underlying mechanism in this dysfunctional state is an abnormal, sustained, positive feedback loop (electrical engineers often call this a howl in electrical circuits) flowing from proprioceptors, muscle spindles, and joint capsules (primarily muscle spindles) to the spinal cord where you can have a spinal reflex back to the extrafusal muscle fibers, as well as the intrafusal fibers. Impulses can also go up to the cerebellum and back to the spinal cord and intrafusal muscle fibers of the spindle via the gamma efferent system. So, in this loop, these muscles can be affected.

"The effect of this neurologic circuit is an increase in muscle tension. This is where the idea of muscle spasms originated in these patients that we see. Often the term muscle spasm is used, and yet there is no real indication of a postural change; it's just that their muscle is over tense. I suggest that the words muscle spasm might be overused.

"We see as an effect of this neurologic circuit an increase in muscle tension and an imbalance in the motor patterns of jolted muscles. You remember this when you took anatomy. I've said it and other anatomists have said it, no one muscle ever acts alone in a given movement."

Thomas Namey, M.D.

"How does sacroiliitis cause a true sciatica? Well, this little triangular muscle, the piriformis, attaches to the anterior capsule of the sacroiliac joint and laterally attaches to the greater trochanter. The piriformis both abducts and externally rotates the hip. Look what nerve crosses right out from underneath it. In fact, in one of three people, branches of the sciatic nerve pierce the belly of the piriformis. This muscle can spasm if you have sacroiliitis because it's attaching to the anterior capsule of the SI joint, but non-inflammatory, traumatic causes are actually more common as causes for piriformis.

"Like people who are ice skaters who slip and land on their buttocks and get a piriformis bruise, the person who runs with a leg length discrepancy, those who slip with their legs shooting out, who sprain the hip insertion of the piriformis, can develop a piriformis syndrome. No one has ever shown this anatomically, but I strongly suspect that people who have branches of the sciatic nerve that have not as yet coalesced and actually pierce the belly of the piriformis may, in fact, be more prone to this problem."

John Barnes, P.T.

"Fascia has propensity in trauma, inflammatory processes, and poor postures over time to solidify and shorten. As it solidifies and shortens, like a spider web, paying absolutely no attention to the origin and insertions of the bodies, the midlines, and the ways in which we have been trained to regionally break the body, it will begin to pull into adjacent areas, putting enormous pressure on

pain sensitive structures of the osseous structures of our body, creating many of the symptoms that our patients present with every day. The fascia creates a three dimensional web to handle the multidirectional forces imposed upon our bodies.

"Modalities, exercise, flexibility programs, mobilization, manipulation, muscle energy techniques, and massage affect muscular and elastic components of the myofascial complex. Only myofascial release affects the totality.

"The elastic components, muscular components, collagenous components, and the cross links that develop, and probably most important of all, its ground substance tend to solidify. That is why it is so important that we begin to consider this. It does not show up in a CAT scan, MRI, x-ray or other tests, nor is anybody looking for it at this point."

The Spring Symposium on Back Pain will convene in New Orleans. Drs. Greenman, Elson, Namey, and Wildman will be there, along with many other outstanding experts on spinal disorders. If you would like more information about the American Back Society, or want a copy of the program for the spring symposium, phone (510) 536-9929, or write me:

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