

The place is Houston, Texas. The time is NOW.

Donald M. Petersen Jr., BS, HCD(hc), FICC(h), Publisher

Two hospitals, Doctors Hospital Airline and Doctors Hospital East Loop, are utilizing chiropractic as a fully integrated service to their patients.

No, they aren't doing it for the money. No, this isn't some kind of medical tokenism to avoid another anti-trust suit. This is a case where a hospital administrator with foresight, a risk manager who knows how to make things happen and still follow the numbers, and a handful of DCs took the time and made the effort to do it right.

Alan Beauchamp, the administrator for both hospitals says it all: "The doctor is our customer." In his mind, there is no discrimination between a DC, DO, MD or any other physician -- a doctor is a doctor. It is how you care for patients that matters. He is himself the patient of one of the chiropractors on staff.

Janice Haines, R.N., CRNA, is the person in charge of both hospital's quality assurance. She is the Risk Manager and takes her job very seriously. Once she was enlightened about chiropractic care, she began researching. She studied chiropractic procedures and reimbursement. She interviewed 60 DCs. She spent the hours doing what was needed to develop the protocols necessary to establish a Department of Chiropractic within these hospitals.

It was ultimately this "homework" that gave the MDs and DOs on staff the confidence they required to accept chiropractic care on a "wait and see" basis. Once included in the hospital environment, chiropractic met the test and gained the respect of the entire hospital staff.

This is not your "chiropractors can practice in the back room" kind of operation. Not only are DCs able to co-admit their patients and have access to the most advanced diagnostic and laboratory facilities, but they are an integral part of all care received by their patients.

When a chiropractor co-admits a patient who requires surgery, he is able to accompany his patient into the operating room. His patient is admitted with confidence. That patient knows his chiropractor will be with him through every aspect of his hospital stay, from the wards, to the operating room, through recovery (please refer to article entitled, "Chiropractors in the Hospital" on page XXXX).

In addition, chiropractors on staff are able to perform manipulation under conscious sedation. This is a form of treatment utilized on those special cases that do not respond to standard manipulation, while retaining the protective reflexes of the patient. This procedure is especially effective on patients with significant muscle spasms or adhesions from prior conditions. Under conscious sedation, there is no muscle contraction. There is also no secondary muscle splinting.

The procedure is usually performed on chronic or severely acute patients. The patient is admitted for three to five days. After going through the usual pre-examinations, the patient is manipulated once each of those three to five days.

Failed back surgery syndrome (FBSS) is especially responsive to a five day treatment plan. The additional two days of treatment increase the effectiveness of treatment substantially in these cases.

The chiropractic staff are currently collecting data that will be used to establish statistics regarding patient outcomes. Thus far, not a single patient has required additional manipulation under conscious sedation for the same condition.

But perhaps even more important than the ability of chiropractic to enter the operating room and perform conscious sedation manipulation, is how chiropractic has become an accepted, respected part of the health care hospital team. This is not to say that these DCs are pro drugs or pro surgery, THEY ARE NOT! But they are strong believers that chiropractic care should be present in every aspect of patient care.

Now instead of sending patients off to MDs in hospital that won't even talk to DCs, the hospital is conducting monthly in-service programs for chiropractors on all aspects of the hospital environment. The staff at these two hospitals (they will be opening a third hospital in the Spring of 1990 due to the success of these two facilities) go out of their way to make DCs feel comfortable. Best of all, the insurance companies appear to be very receptive to chiropractic participating in hospital care.

This is truly the manner in which chiropractic care should enter every hospital. To accept anything less is a compromise that will ultimately not serve the patient nor the profession in the best way possible.

Our patients want us in the hospital with them. Hospitals are waking up to this demand at an ever increasing rate (currently there are between 150 and 200 hospitals that are utilizing chiropractors on staff under some kind of arrangement for their patients). We must seek those hospital administrators who desire the best for their patients and then assist them in utilizing chiropractic to its fullest extent.

We have Mr. Beauchamp and Ms. Haines to thank for helping us develop the model. It is now our job to reproduce, refine and improve on this model in hospitals across the country and around the world.

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Manipulation Under Anesthesia Or Conscious Sedation

Manipulative treatment of the spinal region is the art, science, and practice of the non-operative restoration of the function of bones, joints, muscles, tendons, and ligaments. This requires a thorough knowledge of the anatomy, physiology, and pathological changes of the joints and their surrounding tissues. Manipulation is the most important treatment of both acute and chronic back pain. The overall objective of manipulation is to relieve the patient's pain and disability with a minimum amount of expense to the patient and loss of time from his work and other activities. In acute back pain, when there is severe pain and spasm, an anesthetic may be desirable for manipulation.

Three very important principles must be carefully followed if manipulation under anesthesia or conscious sedation is to be successful. (1) Careful selection of the cases. (2) Careful application of the technique. (3) Careful, well-planned post manipulative care.

In chronic back pain when the patient has received regular manipulative treatment over a long enough period of time to produce results and no improvement, either symptomatic or in character or range of articular motion, has occurred, manipulation under an anesthetic may be desirable.

Indications

The general indications for manipulative procedures under anesthesia and conscious sedation are primarily conditions in which manipulation is the therapy of choice, but which do not respond satisfactorily to manipulation without anesthesia.

Some of the conditions in which manipulation under anesthesia or conscious sedation has produced satisfactory results are nerve entrapment, chronic myositis, chronic fibrositis, anomalies with restricted motion following trauma, chronic muscle contracture, acute muscle spasm associated with subluxation, chronic productive arthritis such as spondylosis, spondylarthritis, spondylarthrosis, lumbarization, sacralization, chronic disc change, old compression fractures, and traumatic torticollis.

Manipulation under anesthesia of these conditions may afford relatively quick relief for the patient with a so-called intractable musculoskeletal disorder. The type of case most amenable to treatment by manipulation is that in which the main pathological cause is the interference with joint motion by the presence of adhesions.

Contraindications

Specific contraindications to manipulation of the spine under anesthesia or conscious sedation are malignancy with metastasis to bone, tuberculosis of the bone, fractures, acute arthritis, acute gout, uncontrolled diabetic neuropathy, syphilitic articular or periarticular lesions, gonorrheal spinal arthritis, excessive spinal osteoporosis, evidence of cord or caudal compression by tumor ankylosis, and malacic bone disease.

Evaluation of the Patient

In general, patients selected for manipulation under anesthesia or conscious sedation are those who have received regular manipulation over a sufficient period of time to obtain results but show no improvement in symptoms, character, or range of motion. In testing, these patients appear to have a very rigid vertebral column and the spinal musculature is spastic. The rigidity and spasticity is increased when motion is attempted. The duration of conservative manipulation without anesthesia or conscious sedation may vary from one day to six weeks.

In selecting patients for manipulation under anesthesia, one must have a thorough understanding of the underlying pathologic condition and how it has led to the present problem. A very careful and detailed history and physical examination are therefore necessary, as well as adequate laboratory procedures for accurate diagnosis and differential diagnosis. Too many times one forgets that the pathologic changes in joint dysfunction are like those in any other pathologic condition: initially there is intra-articular or periarticular irritation with muscle spasm. The muscle spasm and the irritation lead to inflammation, edema, and fibrous reaction, and the fibrous reaction leads to limited mobility. It is much easier to reverse the process in the stage of inflammation and edema than it is after fibrosis has occurred. When the condition advances to fibrosis, one is faced with a prolonged program, and it is at this point that manipulative therapy under anesthesia is most frequently indicated. Even after the manipulative procedures break up the fibrosis, one must institute an adequate program of physical therapy and exercise. Such a program is necessary for sufficient circulation and mobility to prevent the reformation of fibrous tissue. If one does not prevent or lessen the formation of fibrous tissue, the patient's original

problem will recur.

History

In obtaining an adequate history, one needs to know whether the patient's pain is increased or decreased by activity. The pain due to trauma is increased by activity, while that caused by arthritis is usually decreased temporarily by activity, and then intensifies. Localized pain suggests fractures, malignancies, or infections: whereas generalized pain may represent an arthritic or a metabolic disturbance. One also needs to know the types of therapy being used at this time or in the past, and their results. It is helpful to know if compensation insurance is a factor with the patient's problem.

Physical Examination

In addition to routine physical examination procedures, motion palpation of the spine should be utilized; the examiner looks for hyperalgesia at each joint. He looks at and palpates the skin for manifestations of functional changes of the sympathetic nervous system, such as edema, changes in tissue texture, increase or decrease of moisture on the skin, temperature changes, etc. Then he checks for restricted motion by attempting to take each joint through its normal motions, not only the motions under voluntary control but also those not under voluntary control. When palpating tissues, the examiner needs to check for changes in muscles and fascia, such as contracture or lack of tone, which could lead to altered motion and altered body mechanics. In some joints, hypermobility compensates for hypomobility of other joints. Once the appropriate level is determined, one can apply manipulative procedures to normalize the restricted motion component on the basis of definite knowledge rather than indiscriminately.

Laboratory Examination

Laboratory examinations should include a complete blood count, sedimentation rate, thyroid function tests, urinalysis and blood uric acid, creatinine, blood sugar, RA latex, C-reactive protein antiserum agglutination, and electrophoretic serum protein determinations. If the patient is a female past 35 years of age, a Papanicolaou smear should be done. If the patient is a male past 40 years of age, serum alkaline and acid phosphatase determination should be done. After completion of the preliminary work, other laboratory procedures such as isotope scanning, etc., may be indicated.

Radiologic Examination

The minimum x-rays should be anteroposterior and lateral views of the joints involved, with right and left oblique studies of the lumbar and thoracic spine, and flexion, extension and oblique studies of the cervical spine. The anteroposterior studies of the lumbar spine and pelvis should be done with the patient standing. Any difference in leg length will thus be apparent. Many times one will want detailed studies of the joints which are to be manipulated under anesthesia. Motion studies on videotape or cineradiography, may be helpful. One should repeat the x-ray studies 24 to 48 hours after manipulation under anesthesia to see what changes have been brought about by the manipulation procedures. When warranted, CT-scan and/or MRI of the spine should be employed to rule out or confirm suspected pathology.

Electro-Diagnostic Studies

Electro-diagnostic studies of the appropriate spinal out-flows should be performed to rule out specific neurologic dysfunction, and to confirm or differentiate whether it is radicular or peripheral.

Manipulative Procedures

In the practice of manipulation, the forces used in restoring function are: (1) operator forces, (2) patient forces, (3) inherent or intrinsic forces, and (4) any combination of the above. Most of the time a combination is used. One type of operator force is a high velocity/low amplitude force (thrust) applied after removal of all the slack and localization of the vectors of force at the particular point of joint motion restriction. The resultant motion overcomes the restriction.

Another type of operator force is one of low velocity/high amplitude, taking a joint through its full range of motion and thus stretching any tissues that may be contributing to limitation of motion. The more carefully the vectors of force are applied, the less force it takes to overcome the restriction and produce normal physiologic motion. Furthermore, the likelihood of producing trauma is reduced. In using patient forces, the operator has the patient assume a certain position and then directs him to contract certain muscles, or muscle groups, so as to produce motion at a particular point. This maneuver is often combined with operator forces to facilitate mobilization. In another technique using patient forces, the patient inhales or exhales as the operator applies mobilization forces. Inhalation decreases the anteroposterior curves of the spine and externally rotates the extremities, while exhalation increases the anteroposterior curves of the spine and internally rotates the extremities. Many times these respiratory forces can be combined advantageously with operator forces. Because patient forces or inherent forces cannot be used under anesthesia to bring about normalization of a joint, one must depend entirely upon operator forces. These will, therefore, have to be of high velocity/low amplitude for breaking up adhesions, and of low velocity/high amplitude for stretching periarticular tissues. Most frequently, the forces would be a combination of traction, rotation, and side-bending, with the velocity and amplitude selected for the problem at hand.

No amount of experience in the office will qualify a physician for manipulation of the patient under a general anesthetic. In addition to the problems known to be associated with general anesthesia, are the possible complications of the manipulative experience alone. When the patient is fully and properly anesthetized, he has no voluntary or reflex protection against the forcible low amplitude/high velocity techniques that often are required. Fracture, dislocation, or even disc herniation may result accidentally, or if the operator is not particularly skillful. Permanent paralysis can result from overly forceful manipulation in any spinal area, but especially in the cervical and lumbosacral regions. Fracture of ribs is possible with certain thrust techniques in the thoracic area. On the other hand, inadequate manipulative therapy during general anesthesia may result in prolonged disability and a never-ending search by the attending physician for another cause for the patient's problem. Improper postoperative care may result in recurrence of the disturbance.

Postoperative Care

Postoperative care varies from operator to operator. In an effort to minimize the reformation of adhesions, passive and active exercises are prescribed from two to four times a day. Some use electric muscle stimulation, hot moist packs, and massage. Vitamin E is given daily to combat the reformation of adhesions and fibrosis. The most important postoperative care is spinal manipulation. The frequency is determined by the individual patient's condition and is usually daily to three times for the first week, decreasing thereafter.

Anesthesia and Conscious Sedation

Why Anesthesia?

The answer lies in the physiology of anesthesia. Postural tone of the muscles is abolished. The

muscle function of joint stabilization and the splinting action of the muscles of the joint structures is lost. Under anesthesia there remains only ligamentous action and articular changes to limit joint motion. This enables the physician to put an articulation through its normal range of motion, reduce the restrictive adhesions, thereby correcting the involved subluxated vertebrae.

Why Conscious Sedation?

Conscious sedation is a technique whereby the patient is given intravenous hypnotics and/or narcotics, but unlike general anesthesia, remains awake enough to preserve protective reflexes.

Versed is the most widely used intravenous sedative for procedures in which the patient does not need to be fully anesthetized. It is three to four times as potent per mg as valium. It should be administered only by trained qualified personnel because of the potential serious cardiopulmonary side effects. Strict patient monitoring guidelines should be followed.

Conclusions and Summary

Manipulation of the spine under anesthesia has a definite place in the treatment of some common problems in carefully selected cases. Manipulation under anesthesia is only for a select group of patients who fulfill certain requirements. The procedure should only be performed by or under the supervision of an experienced operator. Carrying out manipulation with the patient under anesthesia is satisfying to the physician and usually rewarding to the patient, though the patient frequently approaches the procedure with a degree of unspoken trepidation. Articulations are accomplished that were impossible in the patient by office procedures. As a physician's skill and confidence in his personal techniques increases, he becomes increasingly adept at relieving pain and can shorten the periods of disability considerably.

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Chiropractic Privileges at Doctors Hospital

Level I -- privileges are granted to a chiropractor who has successfully passed the state examination and is licensed by the state of Texas to practice chiropractic. These privileges are granted as a group.

Level II -- privileges are granted to the duly licensed chiropractor who can present documentation of case management for the included conditions by way of interview with the chiropractic committee. This interview will be conducted at the time the application is presented to the committee.

Level III -- privileges are granted to the duly licensed chiropractor who can present documentation of case management of the particular condition and who has been certified by proctorship. These are granted on an individual basis.

Manipulation techniques are granted based on documentation of case management and/or proctorship.

Level I Privileges

CERVICAL:

Cervical diagnoses/syndromes requiring chiropractic care Cervicalgia/cephalgia Cervicocranial syndrome Congenital deformities, uncomplicated sequelae Contusion Degenerative disc disease Degenerative joint disease Fibrosis Articular dyskinesia Myopathy Neuralgia, radiculopathy Scoliosis Spasm Strain Torticollis

THORACIC:

Brachial radiculitis
Congenital deformities, uncomplicated sequelae
Contusion
Costovertebral joint dysfunction
Degenerative disc disease
Degenerative joint disease
Myopathy
Neuralgia, radiculopathy
Scoliosis
Spasm
Sprain
Strain

LUMBAR

Congenital deformities, uncomplicated sequelae
Contusion
Degenerative disc disease
Degenerative joint disease
Facet syndrome
Lordosis
Lumbaralgia
Neuralgia
Transitional L-S segment
Sciatica
Scoliosis
Spasm
Sprain
Strain
Spondylosis

LUMBOSACRAL

Anomalies, uncomplicated sequelae
Contusion
Facet syndrome
Transitional L-S segment
Motor dysfunction
Scoliosis
Spasm
Sprain
Strain
Spondylosis

SACRO-ILLIAC

- Sprain
- S-1 joint syndrome
- Articular dyskinesia

COCCYX

- Coccydynia
- Articular dyskinesia
- Sprain
- Strain

UPPER EXTREMITY

- Bursitis, tenosynovitis, synovitis, epicondylitis
- Contusions
- Sprain
- Strain

LOWER EXTREMITY

- Gait sequelae
- Bursitis, synovitis, tenosynovitis
- Contusions
- Degenerative joint disease
- Sprain
- Strain

Level II Privileges

CERVICAL

- Forestier's
- Thoracic outlet syndrome

LUMBAR

- Baastrup's disease
- Failed back syndrome
- Spondylolisthesis
- Marie Strumpell's disease
- Forestier's disease

UPPER EXTREMITY

- Goyrand's injury
- Adhesive capsulitis
- Calcific tendinitis, bursitis

LOWER EXTREMITY

- Osgood Schlatter's
- Osteochondrosis
- Intra-articular cartilaginous defect
- Plantar fasciitis

Articular dyskinesia

Level III Privileges

Intervertebral disc syndrome
Compression fracture
Shoulder separation
Paresis
Ankylosing spondylitis, complicated
Rieter's syndrome
S.L.E.
Manipulation under conscious sedation
Chiropractic consultant

Hospital Procedures and Protocols For Chiropractic Manipulation Under Conscious Sedation

Chiropractic manipulation is a form of therapy.

Chiropractic manipulation under conscious sedation provides the optimal conditions to a select group of patients to achieve the anticipated improvement in skeletal/muscular functions.

Only the following forms of chiropractic manipulation will be done under conscious sedation:

1. Cox
2. Diversified

Chiropractic manipulation under conscious sedation is a Level III privilege and can be performed only by the chiropractor who has been granted the privilege. This privilege shall be granted after sufficient proctoring has been done by the chairman of the Division of Chiropractic or his designee.

The conscious sedation will be done under the direct supervision of an anesthesiologist.

Procedure

1. The patient who is a candidate for chiropractic manipulation has been admitted to the hospital according to the prior-established protocol concerning admissions.
2. There will be a documented history and physical by the co-admitting medical physician on the chart prior to the treatment.
3. An orthopedic consultation will be obtained prior to the manipulation.
4. As a form of treatment, it must be ordered by a licensed physician.
5. The patient for chiropractic manipulation under conscious sedation will be evaluated by the anesthesiologist prior to the treatment.
6. An informed consent for the procedure will be obtained.
7. The treatment will be done in the recovery room for the safety of the patient.
8. A licensed nurse will assist the anesthesiologist during the procedure.
9. The patient will be NPO for six hours prior to the procedure.

10. All patients undergoing treatment must have an intravenous line established.
11. Blood pressure and oxygen saturation via pulse oximeter will be monitored and recorded.
12. Nursing has a joint responsibility in assuring that the following has been done:
 1. proper patient identification
 2. informed consent obtained
 3. safe positioning of patient
 4. required supplies available
 5. accurate documentation of procedure
13. The patient will be monitored for 30 minutes or longer, if clinically needed, post-procedure. This monitoring will be done in the recovery room according to established recovery room protocol.
14. Any adverse effects will be reported immediately to the co-admitting medical physician.

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