STATE OFFICE OF ADMINISTRATIVE HEARINGS
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SOAH DOCKET NO. 453-03-1329.M5
[MDR TRACKING NO. M5-02-2406-01]

TEXAS MUTUAL INSURANCE COMPANY, **Petitioner**	§	**BEFORE THE STATE OFFICE**
v.	§	**OF**
JUDSON J. SOMERVILLE, M.D., **Respondent**	§	**ADMINISTRATIVE HEARINGS**

DECISION AND ORDER

Texas Mutual Insurance Company (Carrier), sought reversal of the decision issued by the Independent Review Organization (IRO) finding the current perception threshold (CPT) testing done on an injured worker,)_____ (Claimant), was reasonable and medically necessary. This decision reverses the IRO, finding use of the CPT test was not medically necessary.

I. PROCEDURAL HISTORY

Administrative Law Judge (ALJ) Barbara C. Marquardt convened the hearing on June 3, 2003. Carrier was represented by Christopher H. Trickey, attorney. Judson J. Somerville, M.D., appeared telephonically and represented himself. The hearing was concluded that day, but the record closed on July 10, 2003, when the parties' last post-hearing submission was filed.

II. DISCUSSION

A. Background

On_____, Claimant, who was 54 years old and working as a bus driver, sustained a compensable injury, when she fell from a bus and landed on her buttocks. She developed low back pain that extended into her left thigh and left back. Although Claimant was treated with physical therapy, she continued to have discomfort.

At issue is the medical necessity of a current perception threshold (CPT) test performed by Dr. Somerville on the Claimant on November 9, 2001. Dr. Somerville's rationale for, and description of, the CPT test states: "(CPT) test of the right and left lower extremity to rule in/rule out radiculopathy." The IRO decision, written by a physician board-certified in neurosurgery, found that it was appropriate to perform this test five weeks from the date of the injury, as it could have revealed whether radiculopathy was the source of the Claimant's problems. Additionally, the decision noted Claimant is a diabetic and opined that the test might have revealed any changes that might have been present secondary to her diabetes.

B. Applicable Law

An employee who sustains a compensable injury is entitled to all health care reasonably required by the nature of the injury, as and when needed. The employee is specifically entitled to health care that: (1) cures or relieves the effects naturally resulting from the injury; (2) promotes recovery; or (3) enhances the ability to return to or retain employment.[1] "Health care" includes "all reasonable and necessary medical . . . services."[2]

The Commission's *Spine Treatment Guideline* ("STG," now repealed), clarified those services that were reasonable and medically necessary for operative and non operative care to the spine. It stated that the actual need for a diagnostic study would be dependent on both the amount of time that had passed since the date of injury and on the injured worker's documented clinical condition. While the CPT test was not specifically addressed, it is a type of nerve conduction study, and the time recommendation for nerve conduction studies was at six weeks to four months post injury.[3]

The STG glossary defined the following two terms that are pertinent to this case:

- "Medical Necessity B the determination that the tests or treatment provided is required based on the presenting signs or symptoms."

- "Significant Neurological Deficit B signs of sensory impairment, progressive numbness, or increased physiological impairment such as severe weakness, bowel or bladder dysfunction directly related to the spinal injury."

Looking more closely at the Commission's opinion about CPT tests, these statements were written in the 1999 Preamble to the STG:

> The STGRW reviewed nerve conduction studies (NCS), current perception threshold (CPT) . . . . The STGRW and staff concluded that nerve conduction studies were deemed to be an appropriate diagnostic tool and have been included in the List of Diagnostic Interventions . . . of the STG. The STGRW's review of CPT, a type of sensory conductive test, indicated that there was supporting literature for its effectiveness in some medical conditions but that there was little evidence to warrant its use for musculoskeletal conditions. However, staff's review of the literature . . . supported the efficacy of CPT testing for peripheral neuropathy that is not clinically detectable through nerve conduction velocity (NCV) studies. Staff's review . . . also supported the efficacy of CPT testing for the evaluation of radiculopathies and as an appropriate diagnostic tool for the quantitative measure of the functional integrity of sensory nerve fibers. CPT is considered a NCS and is therefore included in the STG. [4]

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[1] TEX. LAB. CODE ANN. §408.021.

[2] TEX. LAB. CODE ANN. §401.011(19).

[3] Formerly at 28 TAC §134.1001 (abolished eff. January 1, 2002).

[4] 24 Tex. Reg. 11458 (December 17, 1999). (Emphasis added.)

C. Treatment History

Dr. Milton Haber treated the Claimant after the injury. When Dr. Haber saw her on October 29, 2001, he diagnosed a soft tissue injury. He found no neurological problems, and his notes do not reflect any signs that she had radiculopathy. Dr. Haber referred the Claimant to Dr. Somerville for pain management, because he felt her pain symptoms had improved about 30%, and she should have healed faster than that.

The Claimant saw Dr. Dwayne Vincent for chiropractic care that helped some, but not much. When Dr. Vincent assessed her condition on October 30, 2001, he found that all bodily systems were working well. Her neurological symptoms were normal, and he found she had no radicular symptoms.

A November 12, 2001, MRI strongly suggested a right-sided disk rupture at the L5-S1 level and degenerative disk disease changes causing foraminal stenosis at the L4-5 level. On May 30, 2002, the Claimant had a CT myelogram that did not show any evidence of nerve root compression.

4. Dr. Somerville's Evidence

Dr. Somerville is board-certified in pain management and anesthesiology. His basic argument was that the STG allowed CPT testing. He felt the weakness and leg pain the Claimant described was consistent with a radiculopathy. Further, Dr. Somerville argued the Claimant's failure to have a pain reduction below seven on a scale of one-to-ten five weeks post injury and after sufficient physical therapy also made him suspect she was suffering from radiculopathy.

When Dr. Somerville saw the Claimant on November 9, 2001, she described her problem as left-sided back pain and pain running down the back of her left leg to her knee. At that time, she said when she sat for a long time, she had to elevate one hip or the other or stand to alleviate the pain in her lower back. She got stuck when going from a sitting to a standing position. She denied having any numbness or weakness in her legs.

E. Carrier's Evidence

Dr. Hershkowitz

Dr. Leonard Hershkowitz, who is a board-certified neurologist, testified for the Carrier. He has taught at the University of Texas and Baylor and been in private practice for over 25 years. Dr. Hershkowitz testified he sees many patients with problems similar to the Claimant's presenting problems in this case (a fall with a back injury), and he is familiar with the electrodiagnostic testing that is appropriate for such patients.

Basically, Dr. Hershkowitz testified it was inappropriate to perform a CPT test on the Claimant, because it cannot be used to diagnose radiculopathy (pain or irritation at the nerve root where it exits from the spine). In his opinion, when there is known radiculopathy, the CPT may be useful in determining how severe the problem is, but that was not the situation with the Claimant. Even if there had been some sign of radiculopathy, the proper test to explore that would have been an

MRI. Then, if the MRI did not rule out radiculopathy, the proper electrodiagnostic tests to use would have been an EMG (which *can* diagnose a radiculopathy) and nerve conduction studies, followed by a CT myelogram.

Dr. Hershkowitz explained that the IRO's reference to the Claimant's diabetes related to the fact that diabetics tend to develop peripheral neuropathies (symptoms at the ends of the nerves) in the extremities, with symptoms that are sensory or motor. CPT testing can be done to evaluate peripheral neuropathies.

In discussing electrodiagnostic testing, including CPT testing, Dr. Hershkowitz testified that for a doctor to justify the use of such testing as medically necessary when the related injury is spinal, there must be a proof that the patient displayed symptoms of a significant neurological deficit, or SND (as defined in Section B above). Dr. Hershkowitz testified that none of the treating doctors found that the Claimant had an SND prior to Dr. Somerville's CPT testing.

The CPT test, according to Dr. Hershkowitz, is an electrodiagnostic tool that generates subjective information; *i.e.*, it requires cooperation from the patient, who must understand instructions and then give the doctor an accurate response as to when they feel the stimulation. It generates quantitative data, in that it tells the doctor how much of a problem there is, as opposed to the types of tests that determine what the problem is.

The medical literature describes the use of CPT testing with patients known to have radiculopathies. Use of the CPT test was improper to diagnose radiculopathy in the Claimant, because it is a very sensitive test, meaning it would have many false positives; *i.e.,* it would find abnormal symptoms in 20% of a normal population group. The CPT test is also good for evaluating peripheral neuropathies. However, the abnormal findings from a CPT test can be from radiculopathy or peripheral neuropathy.

In fact, Dr. Hershkowitz testified the CPT test on the Claimant did "find" significant abnormalities. However, later testing did not validate or correlate with those findings. The MRI findings suggested a ruptured disc. The CT myelogram, as previously mentioned, would have displayed nerve root problems, and it did not.

Dr. Hershkowitz noted that Dr. William Culver, a designated doctor for the Commission, examined the Claimant on June 11, 2002. He diagnosed a soft tissue strain or sprain and degenerative disease of the spine. He also found no objective sign of radiculopathy.

There is no evidence in Dr. Somerville's record that the Claimant described the normal symptoms, according to Dr. Hershkowitz, that would be associated with radiculopathy B numbness or weakness.[5] The pain the Claimant described was above the knee, radiating down her thigh. Pain associated with a nerve root problem would normally be in the leg and foot area. Dr. Hershkowitz testified that Dr. Somerville's objective neurological examination was essentially normal, in that he found the Claimant had normal, symmetrical, reflexes.

[5] The slight weakness Dr. Somerville observed was a motor finding related to weakness in a muscle strength. According to Dr. Hershkowitz., it was not the type of sensory symptom seen when there is radiculopathy.

Dr. Bierner

Dr. Samuel Bierner is board-certified in both physical medicine and rehabilitation and in electrodiagnostic medicine. He agreed with Dr. Hershkowitz that it was not medically necessary to perform a CPT test on the Claimant.

Dr. Bierner noted that nothing in the medical records indicated that the Claimant had clinical symptoms of radiculopathy. As pointed out by Dr. Hershkowitz, the Claimant was not suffering from worsening or deterioration in her neurological functioning.

The CPT testing was done five weeks after the onset of symptoms, and Dr. Bierner pointed out the STG did not recommend such testing until six weeks after the onset of acute back pain. He explained that this timing was logical, because acute lower back pain will often improve with or without treatment over a six-to-twelve week period. Dr. Bierner stated there was no justification for Dr. Somerville to deviate from the timing in the STG, because Dr. Vincent had documented the Claimant's overall improvement in her pain levels over his weeks of treatment. In Dr. Bierner's opinion, needle EMG exams might be useful at five weeks, but not CPT testing.

Pain down the thigh, which was the locus of the Claimant's symptoms, does not imply radiculopathy, according to Dr. Bierner. Also, he agreed with Dr. Hershkowitz that CPT testing does not allow the physician to localize the lesion to a point of certainty in the nerve pathway. In other words, the CPT test is applied to an extremity, and the abnormalities it picks up can be from any source along the nerve's pathway – from its exit point at the spine, in the plexus area, or peripherally.

The order in which Dr. Bierner would test to diagnose radiculopathy would be to first use anatomical imaging with an MRI. If the MRI was indeterminate, then he would do a needle EMG and nerve conduction study. If more information was needed, he would then do a CT myelogram study. He testified that the CPT test would add nothing to the information pool from which he would make a treatment decision.

Finally, Dr. Bierner agreed with Dr. Hershkowitz, that the "findings" Dr. Somerville made with the CPT test were totally inaccurate. Dr. Somerville found radiculopathy on the left side, based on abnormalities he detected in four different levels on the left side. The tests given later to the Claimant found she had a disc herniation at L5-S1 on the right side. The MRI did not detect any nerve root impingement. The CT myelogram, which is the "gold standard" for diagnosing radiculopathy, found a disc protrusion at the L4-5 level, but no sign of a pinched nerve. A bilateral lower extremity needle EMG and nerve conduction velocity test detected no signs of neuropathy or radiculopathy in the Claimant. Thus, the CPT, which is known to give false positive findings, did so in the Claimant's case.

F. Analysis & Conclusion

Nothing in the record except Dr. Somerville's testimony supports his claim that CPT testing was medically necessary for the Claimant. As pointed out by both of the Carrier's expert witnesses, even the medical articles about CPT Dr. Somerville introduced support a conclusion that the CPT test may be useful in determining the magnitude of a known radiculopathy, but it is not an appropriate tool for *diagnosing* radiculopathy in the first place.

It was not medically necessary to administer the CPT test to the Claimant for all of the following reasons:

- The CPT test was administered a week earlier than recommended in the STG.

- As noted in the STG, medical necessity exists when tests are used based on the patient's presenting symptoms. None of the physicians who examined the Claimant found that she had clinical signs of radiculopathy. In particular, there was no indication she suffered from an SND, which might have justified earlier tests of the nerve conduction variety. Furthermore, the documentation proves that the Claimant's pain levels were improving with chiropractic treatment prior to the administration of the CPT test.

- The preamble to the 1999 STG recognized that CPT testing is appropriate for *evaluating* radiculopathies, because it generates quantitative data. This supports the evidence given by both of the Carrier's experts, that CPT tests do not diagnose radiculopathy but may be helpful in evaluating the extent of *known* radiculopathies.

- Dr. Somerville's basis for suspecting the Claimant had a radiculopathy was erroneous. The Claimant's pain in the back of the thigh running down to her knee is not a sign of radiculopathy, which would produce pain in the leg and foot area. Her slight weakness related to weakness in muscle strength – it was not the type of sensory symptom seen when there is radiculopathy. Dr. Somerville did not detect any symptoms of numbness, which is the other presenting sign for radiculopathy.

- The proper test for exploring whether the Claimant had radiculopathy are these, which should have been given in this order: (1) MRI; (2) needle EMG and nerve conduction studies; and, if the symptoms were still unclear, (3) a CT myelogram, which is the "gold standard" for diagnosing radiculopathy.

- CPT tests are very inaccurate, in that they will find abnormalities in 20% of a normal population group. CPT testing does not allow the physician to localize the lesion to a point of certainty in the nerve pathway, because the CPT mechanism is applied to an extremity, and the abnormalities it picks up can be from any source along the nerve's pathway. In fact, as proved by the later testing done on the Claimant that never found radiculopathy, the CPT test found abnormalities on the wrong side (in that her ruptured disc, which could have been a source of radiculopathy, was on the right), *i.e.*, it located abnormalities at four levels on the left side – findings that were false positives.

III. FINDINGS OF FACT

1. On_____,_____ (Claimant), who was 54 years old and working as a bus driver, sustained a compensable injury, when she fell from a bus and landed on her buttocks.

2. The Claimant developed low back pain that extended into her left thigh and left back regions. Although she was treated with physical therapy, she continued to have discomfort.

3. Dr. Milton Haber treated the Claimant after the injury. When Dr. Haber saw her on October 29, 2001, he diagnosed a soft tissue injury. He found no neurological problems, and his notes do not reflect any signs that she had radiculopathy.

4. Dr. Haber referred the Claimant to Dr. Somerville for pain management, because he felt her pain symptoms had improved about 30%, and she should have healed faster than that.

5. The Claimant saw Dr. Dwayne Vincent for chiropractic care that helped some, but not much. When Dr. Vincent assessed her condition on October 30, 2001, he found her neurological symptoms were normal, and he she had no radicular symptoms.

6. Dr. Judson J. Somerville performed a current perception threshold (CPT) test of the right and left lower extremities on the Claimant on November 9, 2001, to rule in/rule out radiculopathy.

7. A November 12, 2001, MRI strongly suggested a right-sided disk rupture at the L5-S1 level and degenerative disk disease changes causing foraminal stenosis at the L4-5 level.

8. On May 30, 2002, the Claimant had a CT myelogram that did not show any evidence of nerve root compression.

9. It was not medically necessary to administer the CPT test to the Claimant for all of the following reasons:

   a. The CPT test was administered a week earlier than recommended in the *Spine Treatment Guideline* (STG).

   b. As noted in the STG, medical necessity exists when tests are used based on the patient's presenting symptoms.
      (1) None of the physicians who examined the Claimant found that she had clinical signs of radiculopathy.

      (2) There was no indication she suffered from a significant neurological deficit, which might have justified earlier tests of the nerve conduction variety.

      (3) The documentation proves that the Claimant's pain levels were improving with chiropractic treatment prior to the administration of the CPT test.

   c. The preamble to the 1999 STG recognized that CPT testing is appropriate for *evaluating* known radiculopathies, because it generates quantitative data.

   d. Dr. Somerville's basis for suspecting the Claimant had a radiculopathy was erroneous.

      (1) The Claimant's pain in the back of the thigh running down to her knee is not a sign of radiculopathy, which would produce pain in the leg and foot area.

      (2) Her slight weakness related to weakness in muscle strength – it was not the

type of sensory symptom seen when there is radiculopathy.

(3) Dr. Somerville did not detect any symptoms of numbness, which is the other presenting sign for radiculopathy.

e. The proper test for exploring whether the Claimant had radiculopathy would have been first to administer an MRI; then a needle EMG and nerve conduction studies; and, if the symptoms were still unclear; a CT myelogram, which is the "gold standard" for diagnosing radiculopathy.

f. CPT tests are very inaccurate, in that they will find abnormalities in 20% of a normal population group.

(1) CPT testing does not allow the physician to localize the lesion to a point of certainty in the nerve pathway, because the CPT mechanism is applied to an extremity, and the abnormalities it picks up can be from any source along the nerve's pathway.

(2) The CPT test found abnormalities on the wrong side (in that Claimant's ruptured disc, which could have been a source of radiculopathy, was on the right), *i.e.*, it located abnormalities at four levels on the left side – findings that were false positives.

IV. CONCLUSIONS OF LAW

1. The Texas Workers' Compensation Commission (Commission) has jurisdiction to decide the issues presented pursuant to the Texas Workers' Compensation Act (the Act), TEX. LAB. CODE ANN. §413.031.

2. The State Office of Administrative Hearings has jurisdiction over matters related to the hearing in this proceeding, including the authority to issue a Decision and Order, pursuant to §413.031 of the Act and TEX. GOV'T CODE ch. 2003.

3. Administration of the CPT test to the Claimant was not medically necessary and, thus, was not permitted by § 408.021 of the Act.

4. Dr. Somerville should not be reimbursed for the cost of administering the CPT test to the Claimant.

ORDER

IT IS THEREFORE, ORDERED that Texas Mutual Insurance Company is not required to reimburse Judson J. Somerville for the CPT testing he performed on _____ on November 9, 2001.

ISSUED this 14th day of August, 2003.

BARBARA C. MARQUARDT
ADMINISTRATIVE LAW JUDGE
STATE OFFICE OF ADMINISTRATIVE HEARINGS