U.S. DEPARTMENT OF LABOR

Employees' Compensation Appeals Board

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In the Matter of TERI L. VALDERRAMA and DEPARTMENT OF DEFENSE,
Fort Bliss, Tex.

*Docket No. 96-2271; Submitted on the Record;*
*Issued August 19, 1998*

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DECISION and ORDER

Before WILLIE T.C. THOMAS, MICHAEL E. GROOM,
A. PETER KANJORSKI

The issue is whether appellant has more than a 19 percent permanent impairment of her left upper extremity or more than a 22 percent permanent impairment of her right upper extremity.

On July 26, 1993 appellant, a military pay clerk, filed a claim stating that she developed pain, numbness and tingling in her right hand as a result of her work duties. The Office of Workers' Compensation Programs accepted her claim for bilateral carpal tunnel syndrome and paid compensation on the periodic rolls beginning January 7, 1994.

The Office referred appellant to Dr. Jonathan F. Cook, a specialist in hand surgery, for an evaluation of permanent impairment. In a report dated June 26, 1995, Dr. Cook diagnosed bilateral carpal tunnel syndrome and fibromyalgia. He noted that appellant had undergone carpal tunnel release on the right side twice but that she continued to complain of numbness and tingling on the right greater than the left, as well as pain radiating up her arms. Dr. Cook reported clinical findings of five degrees of flexion, five degrees of extension, five degrees of ulnar deviation and five degrees of radial deviation of the wrists bilaterally. He reported grip strength measurements at the five different settings on the Jamar Dynamometer of three, two, five, four and three kilograms on the right and three, six, five, six and six kilograms on the left. Both upper extremities, he stated, were hypersensitive to examination. Dr. Cook concluded:

> "Secondary to her loss of wrist motion, [appellant] has a total impairment of 24 percent for both upper extremities. Because of the involvement of the median nerve, she has an additional impairment of 16 percent of each upper extremity. Thus, her total impairment of each upper extremity is 40 percent. [Appellant] has bilateral carpal tunnel syndrome which is relatively mild as evidenced by no

motor changes on EMG [electromyogram] and which has not responded to adequate surgery performed on her right hand."[1]

On September 24, 1995 an Office medical adviser reviewed Dr. Cook's findings and reported that he was unable to reconcile the profound reduction in grip strength and limited wrist motion with Dr. Cook's description of a "mild" carpal tunnel syndrome. Further, the medical adviser noted that there was no reason given for appellant's inability to move her wrists more and that grip strength measurements included no coefficient of variation data, making the reliability of such measurements unsubstantiated. The medical adviser recommended further evaluation to correct these deficiencies.

The Office referred appellant to Dr. Thomas E. Alost, Jr., a specialist in physical medicine and rehabilitation, for a second opinion. In a report dated December 5, 1995, Dr. Alost stated in part as follows:

"At this time, the physical examination of the right upper extremity of [appellant] shows that in the hand she has atrophy of the thenar eminence with a healed surgical incision. She has sharp palpable tenderness overlying the surgical incision and her Tinel's and Phalen's sign are sharply positive. She showed restricted range of motion throughout all motions of the wrist and as well showed limited mobility of the elbow. Please refer to the enclosed work sheets that show the range of motion of the elbow, shoulder and wrists of the right and left upper extremity.

"She also underwent a Jamar grip dynamometer evaluation with coefficient of variation analysis. It was the impression of the results that her grip strength testing coefficients of variation indicate that she did not give her maximal effort; however, because she is diagnosed with bilateral upper extremity injury this would invalidate the test results and only give her average grip strength.

"She showed no loss in sensation in the right wrist. There is a slightly positive Tinel's sign at the elbow region on the right.

"Examination of the left hand shows no evidence of thenar atrophy, but a positive Tinel's and Phalen's sign overlying the left wrist. There is a positive Tinel's sign overlying the ulnar groove. The range of motion evaluation is enclosed on the accompanying work sheets. Please refer to those."

Dr. Alost reported his impression as: (1) right upper extremity entrapment neuropathy, carpal tunnel syndrome, early ulnar nerve entrapment with probable reflex sympathetic dystrophy, sympathetic mediated pain syndrome, right upper extremity; and (2) left wrist carpal

[1] On July 15, 1994 Dr. Michael Boone, a physiatrist, reported that appellant's EMG and nerve conduction studies showed "rather advanced bilateral carpal tunnel syndrome." Specifically, he reported on July 14, 1994 that these findings were most consistent with bilateral carpal tunnel syndrome affecting both motor and sensory components of the nerves, and that findings were in the moderate range in general, bordering on moderate to severe in the right hand.

tunnel syndrome with entrapment of median nerve with possible early entrapment neuropathy left ulnar nerve at cubital tunnel.

He reported range of motion for the left wrist as follows: 14 degrees extension, 21 degrees flexion, 16 degrees radial deviation and 16 degrees ulnar deviation. He reported range of motion for the right wrist as follows: 6 degrees extension, 11 degrees flexion, 10 degrees radial deviation and 12 degrees ulnar deviation. Dr. Alost stated that there was no evidence of sensory deficit.

In reporting his rating of permanent impairment, Dr. Alost stated that he had documented the range of motion of the elbows and wrists, "which are affected by the diagnosis bilateral carpal tunnel syndrome and reflex sympathetic dystrophy." He reported a 52 percent impairment of the right upper extremity and a 51 percent impairment of the left upper extremity. These ratings, he stated, were based predominantly on loss of motor strength, as well as restricted range of motion of the elbows and wrists.

On March 26, 1996 an Office medical adviser reviewed Dr. Alost's findings and noted that his ratings were based on the third edition of the American Medical Association, *Guides to the Evaluation of Permanent Impairment*, which was no longer in use. The medical adviser also noted that grip strength measurements were unreliable. Further, the medical adviser noted that the ratings included reduced elbow motion: "I do not understand how markedly restricted motion of the elbow can be due to carpal tunnel syndrome."[2] For these reasons, the medical adviser used the range of motion Dr. Alost furnished for the wrists and applied them to the current fourth edition of the A.M.A., *Guides*. He determined that Dr. Alost's clinical findings showed a 19 percent permanent impairment of the left upper extremity and a 22 percent permanent impairment of the right upper extremity.

On April 16, 1996 the Office issued a schedule award for a 41 percent permanent impairment of the left and right upper extremities.

The Board finds that this case is not in posture for a determination of whether appellant has more than a 19 percent permanent impairment of her left upper extremity or more than a 22 percent permanent impairment of her right upper extremity.

The fourth edition of the A.M.A., *Guides* provides that permanent impairment of the hand and upper extremity secondary to entrapment neuropathy may be derived by following the grading schemes and procedures provided in Table 11, page 48 and Table 12, page 49, for determining impairment due to sensory or motor deficits.[3] The A.M.A., *Guides* emphasizes that characteristic deformities and manifestations resulting from peripheral nerve lesions, such as

[2] Where the medical evidence does not make clear how markedly restricted motion of the elbow can be due to the accepted condition of carpal tunnel syndrome, the Office medical adviser properly discounted values for elbow abnormalities. It is appellant's burden to establish that any permanent impairment for which she claims compensation is causally related to an employment injury; *see Philip N.G. Barr*, 33 ECAB 948 (1982).

[3] A.M.A., *Guides* 56.

restricted motion, atrophy and vasomotor, trophic and reflex changes, have been taken into consideration in preparing the estimated impairment percents derived from these tables:

> "*If an impairment results strictly from a peripheral nerve lesion, the physician should* not *apply impairment percents from [the range of motion sections]* and *this section, because a duplication and an unwarranted increase in the impairment percent would result."*[4] (Emphasis in the original.)

If restricted motion cannot be attributed to a peripheral nerve lesion, however, motion impairment may be evaluated according to the range of motion sections and combined with the peripheral nerve system impairment percent.[5]

In this case, the Office based its schedule award solely on the restricted motion of appellant's wrists. As explained above, this is permissible only if the restricted motion cannot be attributed to a peripheral nerve lesion. Neither Dr. Cook, Dr. Alost nor the Office medical adviser directly addressed whether the restricted motion in appellant's wrists can be attributed to a peripheral nerve lesion and if not, how the restricted motion was a result of appellant's employment injury. Without this information, the medical evidence fails to make clear whether appellant's impairment estimate may be based on an evaluation of restricted motion.

Further, the Office dismissed any impairment due to loss of power and motor deficit because the coefficients of variation in the Jamar dynomometer testing showed evidence of a lack of maximal effort; however, the Office did not explain how this method of evaluating grip strength constituted an acceptable alternative to the grading scheme and procedure provided in Table 12, page 49, of the fourth edition of the A.M.A., *Guides* for determining impairment due to loss of power and motor deficits.

The Board notes that the record does contain an evaluation of impairment due to loss of power and motor deficits following the very similar grading scheme and procedure provided in Table 11, page 42, of the revised third edition of the A.M.A., *Guides*. Although the evaluation showed an impairment due to loss of power and motor deficits,[6] the Office medical adviser did not address this aspect of appellant's assessment. If Dr. Alost's improper use of the third edition of the A.M.A., *Guides* did not prevent the Office medical adviser from comparing the reported range of motion findings to the applicable protocols of the fourth edition, then it is unclear why the medical adviser could not also apply the reported grading of appellant's loss of power to the procedures provided in Table 12, page 49, of the fourth edition.

[4] *Id*. at 46.

[5] *Id.* The fourth edition of the A.M.A., *Guides* provides an alternative, diagnosis-based method for deriving the impairment of the hand and upper extremity secondary to entrapment neuropathy. Rather than measure the sensory and motor deficits (and possibly restricted motion), the evaluator may use Table 16, page 57, wherein impairment is estimated according to the severity of involvement of each major nerve at each entrapment site.

[6] Appellant was noted to have given a good, consistent effort throughout her assessment notwithstanding the coefficients of variation on the Jamar dynomometer testing.

For these reasons, the Board finds that the medical evidence in this case is not sufficiently developed to allow an informed determination of whether appellant has more than a 19 percent permanent impairment of her left upper extremity or more than a 22 percent permanent impairment of her right upper extremity. The Board will set aside the Office's April 16, 1996 decision and remand the case for a proper evaluation of any employment-related permanent impairment following the protocols of the fourth edition of the A.M.A., *Guides*. After such further development of the evidence as may be necessary, the Office shall issue an appropriate final decision on appellant's entitlement to schedule compensation.

The April 16, 1996 decision of the Office of Workers' Compensation Programs is set aside and the case remanded for further action consistent with this opinion.

Dated, Washington, D.C.
August 19, 1998

Willie T.C. Thomas
Alternate Member

Michael E. Groom
Alternate Member

A. Peter Kanjorski
Alternate Member