

**DECISION AND ORDER**

This case is decided pursuant to Chapter 410 of the Texas Workers' Compensation Act and the Rules of the Texas Department of Insurance, Division of Workers' Compensation. For the reasons discussed herein, the Hearing Officer determines that Claimant is not entitled to a first rib resection and brachial plexus neurolysis for the compensable injury of (Date of Injury).

**STATEMENT OF THE CASE**

On March 16, 2015, Carol A. Fougerat, a Division hearing officer, held a contested case hearing, with the record closing on March 18, 2015, to decide the following disputed issue:

Is the preponderance of the evidence contrary to the decision of the Independent Review Organization (IRO) that Claimant is not entitled to a first rib resection and brachial plexus neurolysis for the compensable injury of (Date of Injury)?

**PARTIES PRESENT**

Petitioner/Claimant appeared and was assisted by NA, ombudsman.  
Respondent/Carrier appeared and was represented by EB, attorney.

**EVIDENCE PRESENTED**

The following witnesses testified:

For Claimant: Claimant  
Dr. O  
For Carrier: Dr. J

The following exhibits were admitted into evidence:

Hearing Officer's Exhibits: HO-1 and HO-2  
Claimant's Exhibits: C-1 through C-16  
Carrier's Exhibits: CR-1 through CR-8

**DISCUSSION**

Claimant sustained a compensable injury to her right shoulder on (Date of Injury). Claimant has undergone physical therapy, diagnostic testing, pain management, injections and right shoulder arthroscopic surgery. Claimant testified that she continues to suffer from partial and full shoulder dislocations, numbness and tingling in her right upper extremity, and loss of strength in her right arm. Claimant has been diagnosed with thoracic outlet syndrome (TOS). Claimant's treating

doctor, MO M.D., a vascular surgeon, has recommended a first rib resection and right brachial plexus neurolysis. The request was denied by the Carrier and subsequently referred to an IRO.

The IRO reviewer, identified as a board certified neurosurgeon, upheld the Carrier's denial. The IRO reviewer explained that there are two types of neurogenic claudication, neurogenic and vascular. The IRO reviewer stated that it was not clear or documented whether or not Dr. O feels that Claimant's thoracic outlet syndrome is neurogenic or vascular, and that Claimant has had two separate EMG's which show no evidence of significant nerve root, brachial plexus or peripheral nerve injury. The IRO reviewer also noted that there were no imaging studies documenting potential compression of the brachial plexus by a cervical rib or other musculoskeletal structures. In the absence of any EMG evidence of brachial plexus dysfunction, the brachial plexus neurolysis would be unlikely to be of any clinical benefit.

The IRO reviewer then went on to state that, if it is felt that Claimant's thoracic outlet syndrome is vascular, it would still be unlikely for a brachial plexus neurolysis to result in any benefit, and that non-invasive studies are not predictive of success with surgery. The IRO reviewer noted that Claimant has vascular abnormalities which, if anything, are greater on the opposite side of her symptoms, and a more definitive diagnostic test for dynamic arterial occlusion has not been performed.

Texas Labor Code Section 408.021 provides that 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. Health care reasonably required is further defined in Texas Labor Code Section 401.011 (22a) as health care that is clinically appropriate and considered effective for the injured employee's injury and provided in accordance with best practices consistent with evidence based medicine or, if evidence based medicine is not available, then generally accepted standards of medical practice recognized in the medical community. Health care under the Texas Workers' Compensation system must be consistent with evidence based medicine if that evidence is available. Evidence based medicine is further defined in Texas Labor Code Section 401.011 (18a) to be the use of the current best quality scientific and medical evidence formulated from credible scientific studies, including peer-reviewed medical literature and other current scientifically based texts and treatment and practice guidelines. The Commissioner of the Division of Workers' Compensation is required to adopt treatment guidelines that are evidence-based, scientifically valid, outcome-focused, and designed to reduce excessive or inappropriate medical care while safeguarding necessary medical care. Texas Labor Code Section 413.011(e). Medical services consistent with the medical policies and fee guidelines adopted by the commissioner are presumed reasonable in accordance with Texas Labor Code Section 413.017(1).

In accordance with the above statutory guidance, the Division of Workers' Compensation has adopted treatment guidelines by Division Rule 137.100. This rule directs health care providers

to provide treatment in accordance with the current edition of the Official Disability Guidelines (ODG), and such treatment is presumed to be health care reasonably required as defined in the Texas Labor Code. Thus, the focus of any health care dispute starts with the health care set out in the ODG. Also, in accordance with Division Rule 133.308(s), "A decision issued by an IRO is not considered an agency decision and neither the Department nor the Division are considered parties to an appeal. In a Contested Case Hearing (CCH), the party appealing the IRO decision has the burden of overcoming the decision issued by an IRO by a preponderance of evidence-based medical evidence."

### **ODG Recommendations for TOS Surgery:**

Recommended only as indicated below. Over 85% of patients with acute Thoracic Outlet Compression symptoms will respond to a conservative program, including exercise. While not well supported by quality studies, cases with progressive weakness, atrophy, and neurologic dysfunction are sometimes considered for surgical decompression. A confirmatory response to EMG guided scalene block, and/or confirmatory electrophysiologic testing is advisable before consideration for surgery. Vascular thoracic outlet syndrome (TOS), although much less common than neurologic TOS, requires more urgent care. Thoracic outlet syndrome (TOS) refers to compression of the neurovascular structures at the superior aperture of the thorax. It represents a constellation of symptoms. The cause, diagnosis, and treatment are controversial. The clinical findings in thoracic outlet syndrome (TOS) may be similar to those in carpal tunnel syndrome, ulnar neuropathy, or cervical radiculopathy. A physician should consider these alternative diagnoses before requesting TOS surgery. Most patients with TOS have cervical ribs. Overall, long-term outcomes after TOS surgery are worse than outcomes with medical management of TOS. (Washington, 2002) (Wickizer, 2004) Surgical intervention (scalenectionomy) seems to be the treatment of choice in terms of restoring quality of life and physical activity for professional athletes admitted with thoracic outlet syndrome. (Baltopoulos, 2008) Minimally invasive surgery can help selected patients with disabling neurogenic thoracic outlet syndrome (NTOS), and NTOS surgery is especially helpful to adolescents compared with adults. NTOS results from compression of the brachial plexus nerves running either through the neck just above the collarbone or down into the upper chest and just under the collarbone near the shoulder, an area known as the interscalene triangle. In some patients, nerve compression occurs within the subcoracoid space underlying the pectoralis minor muscle tendon near the shoulder, prompting the development of a minimally invasive procedure called pectoralis minor tenotomy (PMT), consisting of detachment of the pectoralis minor tendon. The study compared PMT with traditional open surgery, which combines PMT with supraclavicular decompression (SCD+PMT). After surgery, 82% reported significant and progressive improvement at the 3-month follow-up, including 75% of the patients

who underwent isolated PMT and 84% who underwent the combined procedure.  
(Vemuri, 2013) See also Electrodiagnostic testing for TOS (thoracic outlet syndrome).

### **ODG Indications for Surgery -- Surgery for Thoracic Outlet Syndrome (TOS):**

#### **Criteria for Neurogenic TOS:**

1. **Conservative Care:** Physical therapy leading to home exercise for a minimum of 3 months. PLUS
2. **Subjective Clinical Findings:** In the affected upper extremity, all of the following must be found:
  - (a) Pain,
  - (b) Numbness or paresthesia in the ulnar nerve distribution. PLUS
3. **Objective Clinical Findings:** In the affected upper extremity, all of the following electrodiagnostic abnormalities must be found:
  - (a) Reduced amplitude median motor response,
  - (b) Reduced amplitude ulnar sensory response,
  - (c) Denervation in muscles innervated by lower trunk of the brachial plexus

#### **Criteria for Vascular TOS, Arterial:**

1. **Subjective Clinical Findings:** At least three of the following must be present in the affected upper extremity:
  - (a) Pain,
  - (b) Swelling or heaviness,
  - (c) Decreased temperature or change in color,
  - (d) Paresthesias in the ulnar nerve distribution. PLUS
2. **Objective Clinical Findings:** At least one of the following:
  - (a) Pallor or coolness,
  - (b) Gangrene of the digits in advanced cases. PLUS
3. **Imaging Clinical Findings:** Abnormal arteriogram

#### **Criteria for Vascular TOS, Venous:**

1. **Subjective Clinical Findings:** At least three of the following must be present in the affected upper extremity:
  - (a) Pain,
  - (b) Swelling or heaviness,
  - (c) Decreased temperature or change in color,
  - (d) Paresthesias in the ulnar nerve distribution. PLUS
2. **Objective Clinical Findings:** At least two of the following:
  - (a) Swelling of the arm,

- (b) Venous engorgement,
- (c) Cyanosis. PLUS

### 3. **Imaging Clinical Findings:** Abnormal venogram

Dr. O testified that Claimant meets the ODG requirements for the proposed TOS decompression. Dr. O explained that Claimant's normal EMG/NCV studies ruled out other diagnoses, such as carpal tunnel syndrome or cubital tunnel syndrome as possible causes of Claimant's symptoms. Dr. O testified that Claimant underwent a scalene block (Botox), which provided a positive response, temporarily relieving Claimant's symptoms. Dr. O testified that his was indicative of TOS, and, since non-surgical treatment was unsuccessful, he has recommended TOS surgery.

Carrier raised the question as to whether or not Claimant actually suffers from TOS. Dr. O testified that Claimant has a clinical diagnosis of TOS based on positive physical findings consistent with TOS, positive response to the scalene block, the EMG/NCV ruled out other possible causes for Claimant's symptoms, and the cervical MRI demonstrated no significant cervical disc disease. Dr. O opined that Claimant suffers from a "mixed" TOS, neurogenic and neurovascular.

JJ, M.D., board certified in physical medicine and rehabilitation, performed an IME in this case. Dr. J examined Claimant on March 7, 2014, and she testified that Claimant does not meet the criteria for either neurogenic or vascular TOS. Dr. J testified that she reviewed the medical literature regarding TOS in forming her opinion. Dr. J cited, *The Thoracic Outlet Syndromes*, Mark A. Ferrante, M.D., Department of Neurology, University of Tennessee, Memphis, TN, November 5, 2011. Dr. J disagreed with the opinion of Dr. O that Claimant suffers from a variant of both neurogenic and vascular TOS. Dr. J testified that a diagnosis of non-specific TOS does not exist.

Dr. O testified that, as a vascular surgeon, he recommends to the surgery to relieve Claimant's symptoms. The IRO referred to the recommendations in the ODG for TOS surgery, which, for neurogenic TOS, require objective clinical findings in the affected upper extremity. The ODG requires all of the following electrodiagnostic abnormalities must be found:

- (a) reduced amplitude median motor response,
- (b) reduced amplitude ulnar sensory response,
- (c) denervation in muscles innervated by lower trunk of the brachial plexus.

The IRO reviewer noted these findings were not documented in the medical records or confirmed by EMG studies.

The IRO reviewer also stated that, if it is felt that Claimant's TOS is vascular, it would still be unlikely for a brachial plexus neurolysis to result in any benefit and that non-invasive studies are not predictive of success with surgery. The IRO reviewer also noted that Claimant has vascular

abnormalities which, if anything, are “greater on the opposite side of her symptoms,” and a more definitive diagnostic test for dynamic arterial occlusion has not been performed.

There are conflicting medical opinions regarding the necessity of the proposed surgery. Based on the evidence presented at this hearing, it does not appear that Claimant meets the criteria set out in the ODG for a first rib resection and brachial plexus neurolysis. Dr. O provided his opinion that the proposed procedure is medically necessary for Claimant’s compensable injury, however, it appears that Carrier has only accepted an injury to the right shoulder. Dr. O testified that his opinion was based on his medical experience, knowledge and training, but he failed to identify what, if any, evidence-based medicine he relied on to form the basis of his opinion regarding the diagnosis and treatment of TOS. Considering the evidence presented, Claimant failed to provide an evidence-based medical opinion contrary to the determination of the IRO. The preponderance of the evidence is not contrary to the IRO decision that Claimant is not entitled to a first rib resection and brachial plexus neurolysis for treatment of the compensable injury of (Date of Injury).

The Hearing Officer considered all of the evidence admitted. The Findings of Fact and Conclusions of Law are based on an assessment of all of the evidence whether or not the evidence is specifically discussed in this Decision and Order.

### **FINDINGS OF FACT**

1. The parties stipulated to the following facts:
  - A. Venue is proper in the (City) Field Office of the Texas Department of Insurance, Division of Workers’ Compensation.
  - B. On (Date of Injury), Claimant was the employee of (Employer), Employer.
  - C. On (Date of Injury), Employer provided workers’ compensation coverage with Alaska National Insurance Company, Carrier.
  - D. Claimant sustained a compensable injury on (Date of Injury).
  - E. The IRO determined that the proposed first rib resection and brachial plexus neurolysis is not medically necessary for the compensable injury of (Date of Injury).
2. Carrier delivered to Claimant a single document stating the true corporate name of Carrier, and the name and street address of Carrier’s registered agent, which document was admitted into evidence as Hearing Officer’s Exhibit Number 2.

3. Claimant does not meet the requirements of the ODG for a first rib resection and brachial plexus neurolysis and she failed to present other evidence-based medicine supporting the necessity for this procedure.
4. A first rib resection and brachial plexus neurolysis is not health care reasonably required for the compensable injury of (Date of Injury).

### **CONCLUSIONS OF LAW**

1. The Texas Department of Insurance, Division of Workers' Compensation, has jurisdiction to hear this case.
2. Venue is proper in the (City) Field Office.
3. The preponderance of the evidence is not contrary to the decision of the IRO that a first rib resection and brachial plexus neurolysis is not health care reasonably required for the compensable injury of (Date of Injury).

### **DECISION**

Claimant is not entitled to a first rib resection and brachial plexus neurolysis for the compensable injury of (Date of Injury).

### **ORDER**

Carrier is not liable for the benefits at issue in this hearing. Claimant remains entitled to medical benefits for the compensable injury in accordance with §408.021.

The true corporate name of the insurance carrier is **ALASKA NATIONAL INSURANCE COMPANY**, and the name and address of its registered agent for service of process is:

**CT CORPORATION SYSTEM  
1999 BRYAN STREET, SUITE 900  
DALLAS, TX 75201**

Signed this 18<sup>th</sup> day of March, 2015.

Carol A. Fougerat  
Hearing Officer