

Medical Treatment Guidelines

Washington State Department of Labor and Industries

Review Criteria for Vascular Thoracic Outlet Syndrome Surgery¹ Surgery for vascular Thoracic Outlet Syndrome requires Utilization Review (UR).

The department's UR vendor will review requests for vascular TOS surgery in accordance with the review criteria listed below.

Type of TOS	Subjective	Objective	Imaging
Vascular TOS arterial.	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. AND objective criteria	At least one of the following: A. Pallor or coolness. B. Gangrene of the digits in advanced cases. AND	C. Abnormal arteriogram.
Vascular TOS venous.	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. AND objective criteria	At least two of the following: A. Swelling of the arm. B. Venous engorgement. C. Cyanosis. AND	D. Abnormal venogram.

Notes

1. The clinical findings in 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.
2. Most patients with TOS have cervical ribs.
3. The Department of Labor and Industries has recently concluded a retrospective study of outcomes of thoracic outlet surgery on patients with Labor and Industries claims. The results indicate that long-term outcomes after TOS surgery are worse than outcomes with medical management of TOS.
4. The electromyographer should rule out neuropathic conditions that might mimic TOS, specifically cervical radiculopathy, carpal tunnel syndrome, ulnar neuropathy and polyneuropathy.

¹ The neurogenic portion of the original 1995 guideline was removed October 2010 because neurogenic TOS surgery became its own separate guideline.