

Review Criteria for Vascular Thoracic Outlet Syndrome Surgery^a

Surgery for vascular Thoracic Outlet Syndrome requires [Utilization Review \(UR\)](#)^b.

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

A request may be appropriate for surgery	AND the diagnosis is supported by these clinical findings:		
Type of vTOS	Subjective	Objective	Diagnostic Findings
Arterial	At least three of the following must be present in the affected upper extremity: <ul style="list-style-type: none"> • Pain • Swelling or heaviness • Decreased temperature or change in color • Paresthesias in the ulnar nerve distribution 	At least one of the following: <ul style="list-style-type: none"> • Pallor or coolness • Gangrene of the digits in advanced cases 	Abnormal arteriogram
Venous	At least three of the following must be present in the affected upper extremity: <ul style="list-style-type: none"> • Pain • Swelling or heaviness • Decreased temperature or change in color • Paresthesias in the ulnar nerve distribution 	At least two of the following: <ul style="list-style-type: none"> • Swelling of the arm • Venous engorgement • Cyanosis 	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.

^a The neurogenic portion of the original 1995 guideline was removed in October 2010 when neurogenic TOS surgery became a separate guideline.

^b <https://lni.wa.gov/patient-care/authorizations-referrals/authorization/utilization-review>