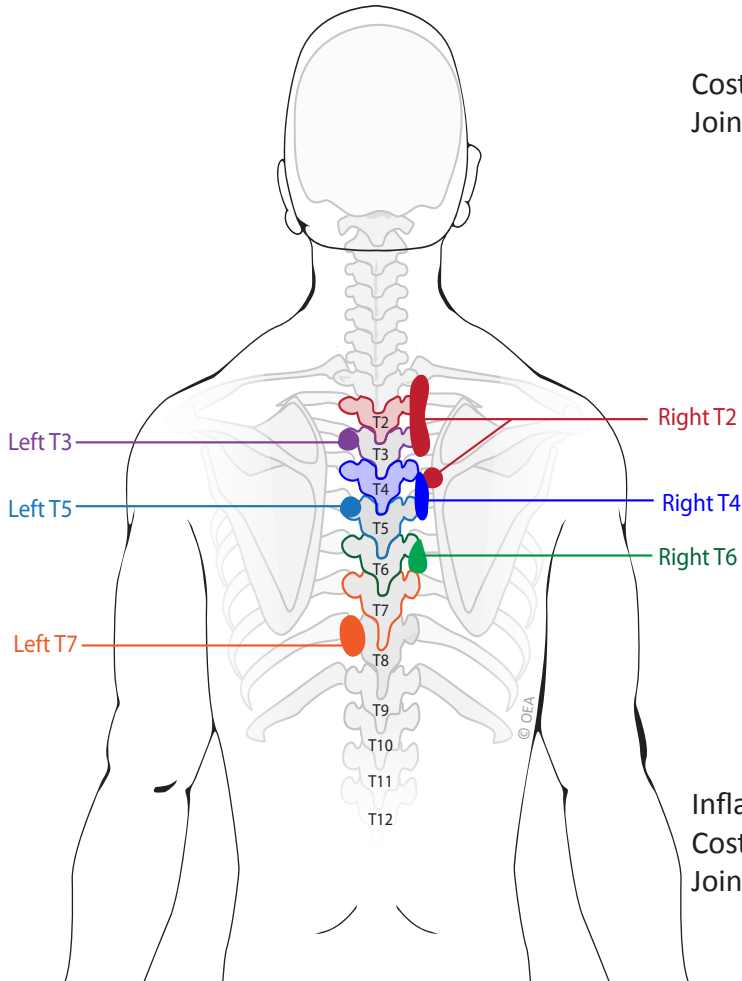
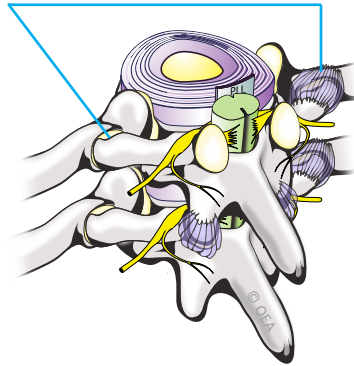


# Costo-Transverse Joint Pain Patterns



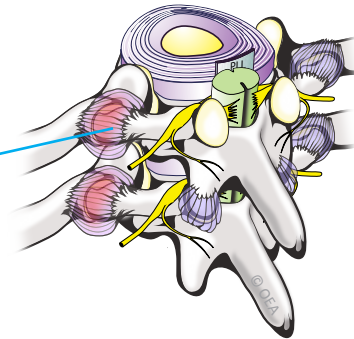
## Normal Anatomy

Costo-Transverse Joint



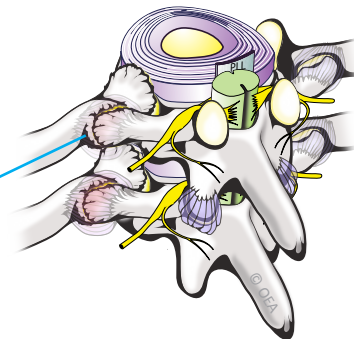
## Costo-Transverse Joint Synovitis

Inflamed Costo-Transverse Joint



## Costo-Transverse Joint Arthrosis

Degenerated Costo-Transverse Joint



Based on: Young BA et al. Thoracic costotransverse joint pain patterns: a study in normal volunteers. *BMC Musculoskelet Disord.* 2008;9:140.

**ROCK NAVARKAL, M.D., J.D.**  
 Double Board Certified • Fellowship Trained  
 Pain Medicine • Sports Medicine • Electrodiagnostic Medicine



Cherry Creek Office  
 Cherry Creek Plaza II  
 650 S. Cherry St., Suite 1015  
 Denver, CO 80246

Phone: 303-377-7777  
 Fax: 303-377-7775  
 Email: [rock@denverpainmd.com](mailto:rock@denverpainmd.com)  
 Website: [www.denverpainmd.com](http://www.denverpainmd.com)