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References for incidence of Industrial Causation for TOS Patients in the Workplace

The following references cite an increase in the incidence of TOS in workers who use their arms for repetitive, often overhead, strenuous activities when compared to more sedentary workers, with similar demographics, in the same place of employment.

Luopajarvi, T. et al: The effects of ergonomic measures on the health of the Neck and the Upper Extremities of assembly line packers : A four year follow up study, In: Proceedings of the 8th Congress of the International Ergonomics Assn, Tokyo, Japan, August 23-27, 1982 pp515-6

Sallstrom J. Schmidt H., Cervicobrachial disorders in certain occupations with special reference to compression in the Thoracic Outlet, in Am J Industr Med, 6, 45-52 1984

Toomingas A, Hagberg M et al: Outcomes of the abduction external rotation test among manual and office workers, Am. J Industr Med Vol 19, pp215-227, 1991

Hagberg M, Silverman B, et al: Work Related Musculoskeletal Disorders (WMSDs): A Reference Book for Prevention, Kuorinka I, Forcier L (eds) Taylor and Francis Inc 1900 Frost Rd, Bristol PA 19007

Additional References associated with TOS – diagnosis and treatment

Sanders, RJ, Haug C. Subclavian vein obstruction and TOS: a review of etiology and management. Ann Vasc Surg. 1990;4(4):397-410

Braun, RM, Rechin M, Shah K. Pulse Oximetry measurements in the evaluation of patients with possible thoracic outlet syndrome. J Hand Surg. 2012;37:2564-2569

Leffert RD. Thoracic Outlet Syndrome in Gelberman RH ed. Operative Nerve repair and Reconstruction, JB Lippincott, Philadelphia 1991

Urschel HC et al. Thoracic Outlet Syndrome masquerading as coronary artery disease (pseudoangina) Ann Thoracic Surg. 1973;16(3): 229-248.

Raskin NH, Howard MW, et al. Headache as the leading symptom of thoracic outlet syndrome: Headache J Face Pain, 1985;25 (4): 208-210.

Novak CB, Mackinnon SE, Thoracic Outlet Syndrome, Orthopaedic Clinics of North America, 1996; 27 (4): 747-762.