

Publications addressing use of the VibroSense Meter® are printed in **bold**.
The most recent publication is first in the list.

Strong association between vibration perception thresholds at low frequencies (4 and 8 Hz), neuropathic symptoms and diabetic foot ulcers

Eero Lindholm¹, Magnus Löndahl², Katarina Fagher², Jan Apelqvist¹, Lars B. Dahlin^{3,4}

February 28, 2019, PLOS ONE

1. Department of Clinical Sciences, Endocrinology, Lund University, Malmö, Sweden, |2. Department of Clinical Sciences, Endocrinology, Lund University, Lund, Sweden, | 3 Department of Translational Medicine— Hand Surgery, Lund University, Malmö, Sweden, |4 Department of Hand Surgery, Skåne University Hospital, Malmö, Sweden

A novel method for measuring vibration perception thresholds (VPTs) shows an improvement in VPTs in type 1 diabetes patients with improved metabolic control.

Eero Lindholm, Tarq Elgzyri, Magnus Löndahl and Lars Dahlin

October 3, 2018, Abstract EASD in Berlin

Impaired vibrotactile sense in children and adolescents with type 1 diabetes - Signs of peripheral neuropathy.

Erik Ising, Lars B. Dahlin, Helena Elding Larsson

April 19, 2018, PLOS ONE

Vibrotactile Perception in Finger Pulps and in the Sole of the Foot in Healthy Subjects among Children or Adolescents

Lars B. Dahlin, Nuray Güner, Helena Elding Larsson, Toni Speidel

April 2, 2015, PLOS ONE

Test-retest reliability of neurophysiological tests of hand-arm vibration syndrome in vibration exposed workers and unexposed referents.

Lars Gerhardsson, Lennart Gillström and Mats Hagberg.

22 October 2014, Journal of Occupational Medicine and Toxicology 2014, 9:38

Impaired vibrotactile sense at low frequencies in fingers in autoantibody positive and negative diabetes

E. Dahlin, E. Ekholm, A. Gottsater, T. Speidel, L.B. Dahlin

27 February 2013, Diabetes Research and Clinical Practice

Neurosensory sequelae assessed by thermal and vibrotactile perception thresholds after local cold injury.

Carlsson D, Burström L, Lilliesköld VH, Nilsson T, Nordh E, Wahlström J.

17 February 2014, Int J Circumpolar Health

Vibration thresholds are increased at low frequencies in the sole of the foot in diabetes - a novel multi-frequency approach

J. Nelander¹, T. Speidel, A. Björkman, L. B. Dahlin¹,*

4 NOV 2012, Diabetic Medicine

Vibrotactile sense in patients with diabetes and carpal tunnel syndrome

Thomsen, R. Cederlund*, T. Speidel† and L. B. Dahlin

2011 Diabetic Medicine 28, DOI: 10.1111/j.1464-5491.2011.03308.x

Vibrotactile sense in median and ulnar nerve innervated fingers of men with Type 2 diabetes, normal or impaired glucose tolerance, 2008 Diabetic Medicine 25,
L. B. Dahlin, S. Thrainsdottir, R. Cederlund, N. O. B. Thomsen, K. F. Eriksson†, I. Rosén‡, T. Speidel and G. Sundqvist
DOI: 10.1111/j.1464-5491.2008.02433.x

Necking LE, Lundborg G, Lundström R, Thornell LE, Fridén J. Hand muscle pathology after long-term vibration exposure. *J Hand Surg* 29B: 5: 431-437, 2004.

Lundborg G, Rosén B. The two-point discrimination test – time for a re-appraisal?. *J Hand Surg* 29B: 5: 418-422, 2004.

Necking LE, Fridén J and Lundborg G. Reduced muscle strength in abduction of the index finger: An important clinical sign in hand-arm vibration syndrome. *Scand J Plast Reconstr Surg Hand Surg*, 2003; 37: 365-370.

Cederlund R, Iwarsson S, Lundborg G. Hand function tests and questions on hand symptoms as related to the Stockholm workshop scales for diagnosis of hand-arm vibration syndrome. *J Hand Surg* 28B: 2: 165-171, 2003.

Rosén B, Lundborg G. A new Model Instrument for Outcome After Nerve Repair. *Hand Clin* 19; 463-470, 2003.

Carlsson I, Cederlund R, Holmberg J, Lundborg G. Behavioural treatment of post-traumatic and vibration-induced digital cold sensitivity. *Scand J Plast Reconstr Surg Hand Surg*, 37:371-378, 2003.

Necking LE, Lundborg G, Fridén J. Hand muscle weakness in long-term vibration exposure. *J Hand Surg (Br)*. 27:6:520-525, 2002.

Lundborg G, Rosén B, Knutsson L, Holtås S, Ståhlberg F, Larsson EM. Hand-arm-vibration syndrome (HAVS): is there a central nervous component? An fMRI study. *J Hand Surg [Br]* 27;6:514-9, 2002.

Dahlin LB, Lundborg G. Vibration-induced hand problems: Role of the peripheral nerves in the pathophysiology *Scand J Plast Reconstr Hand Surg* 35: 225-232, 2001.

Cederlund R, Nordenskjöld U, Lundborg G. Hand-arm vibration-exposure influences performance of daily activities. *Disability and Rehabilitation* 23:570-577, 2001

Rosén B, Dahlin LD, Lundborg G. Assessment of functional outcome after nerve repair in a longitudinal cohort. *Scand J Plast Reconstr Hand Surg* 34: 71-78, 2000.

Strömberg T, Dahlin L, Rosén I, Lundborg G. Neurophysiological findings in vibration-exposed male workers. *J Hand Surg* 24B:203-209, 1999.

Cederlund R, Isacson Å, Lundborg G. Hand function in workers with hand-arm vibration syndrome. *J Hand Therapy* 12: 16-24, 1999.

Lundborg G, Dahlin L, Strömberg T. Vibration-induced neuropathy of the hand. In: Proceedings (eds. Lundström and Lindmark), 8th International Conference on hand-arm vibration, June 9-12, 1998, Umeå, Sweden, pp 155-163.

Strömberg T, Lundborg G, Dahlin L. Vibrotactile sense in the hand-arm-vibration syndrome. Scand J Work Environ Health. Scand J Work Environ Health 24: 495-502, 1998.

Rosén B, Lundborg G. A new tactile gnosis instrument in sensibility testing. J Hand Therapy, 11: 251-257, 1998.

Strömberg T, Dahlin LB, Brun A, Lundborg G. Structural nerve changes at wrist level in workers exposed to vibration. Occupational and Environmental Medicine 54; 307-311, 1997.

Strömberg T, Lundborg G, Holmqvist B, Dahlin LB. Impaired regeneration in rat sciatic nerves exposed to short-term vibration. J Hand Surg 21B: 746-749, 1996.

Strömberg T, Dahlin LB, Lundborg G. Hand problems in 100 vibration-exposed symptomatic male workers. J Hand Surg 21B: 315-319, 1996.

Necking LE, Fridén J, Lundström R, Lundborg G, Thornell LE. Skeletal muscle changes after short term vibration. J Scand Plast Reconstr Hand Surg 30: 99-103, 1996

Necking LE, Lundström R, Dahlin L, Lundborg G, Thornell LE, Fridén J. Tissue displacement is a causative factor in vibration-induced muscle injury. J Hand Surg. 21B, 6: 753-757, 1996.

Lundborg G, Dahlin L, Cederlund R, Strömberg T. Vibrerande verktyg kan ge känselstörningar - viktigt att känna till. Läkartidningen. 93: 2423-2427, 1996.

Östman F, Lundborg G, Lilja B. Is vibration-induced white fingers a reversible syndrome if vibration is stopped? J Hand Surg 21B: 750-752, 1996.

Bergman S, Widerberg A, Danielsen N, Lundborg G, Dahlin L. Nerve regeneration in nerve grafts conditioned by vibration exposure. Rest. Neurol. Neurosci. 7: 165-169, 1995.

Lundborg G, Dahlin LB. Vibration-induced hand problems. In: Current Trends in Hand Surgery (Vastamäki M, ed.) Excerpta Medica International Congress Series 1083, IFSSH, Helsinki, Elsevier Science B.V, pp. 563-571, 1995. (Book chapter).

Åkesson I, Lundborg G, Horstmann V, Skerfving S. Neuropathy in female dental personnel exposed to high frequency vibrations. Occupational and Environmental Medicine, 52: 116-123, 1995.

Dahlin LB, Lundborg G. Mechanisms underlying neuromuscular dysfunction following vibration exposure. Arbete och Hälsa 1995; 5:17-25. Stockholm National Institute of Occupational Health.

Lundborg G. Pain, nerve dysfunction and fatigue in a vibration exposed population. Quality of Life Research, 3: 25-27, 1994.

Rosén I, Strömberg T, Lundborg G: Neurophysiological investigation of hands, damaged by occupational vibrations: comparison with idiopathic carpal tunnel syndrome. Scand J Plast Reconstr Hand Surg. 27: 209-216, 1993.

Necking LE, Dahlin LB, Fridén J, Lundborg G, Lundström R and Thornell LE. Vibration induced muscle injury. An experimental model and preliminary findings. J Hand Surg 17B: 270-274, 1992.

Lundborg G, Dahlin LB, Lundström R, Necking LE and Strömberg T. Vibrotactile function of the hand in compression and vibration-induced neuropathy. Sensibility index - a new measure. Scand J Plast Reconstr Hand Surg 26: 275-279, 1992.

Dahlin LB, Necking LE, Lundström R and Lundborg G. Vibration exposure and conditioning lesion effect in nerves. An experimental study in rats. J Hand Surg 17A:5: 858-861, 1992.

Lundström R, Strömberg T, Lundborg G, Vibrotactile perception threshold measurement for diagnosis of sensory neuropathy. Description of a reference population. Int Arch Occupational Environmental Health 64: 201-207, 1992.

Lundström R, Strömberg T, Lundborg G. Taktilometri för diagnostik av sensoriska neuropatier. Arbete och Hälsa 24: 1990.

Lundborg G, Dahlin LB, Hansson HA, Kanje M, Necking LE. Vibration exposure and peripheral nerve fiber damage. J Hand Surg 15A; 2: 346-351, 1990.

Hjortsberg V, Rosén I, Örbaek P, Lundborg G and Balogh I: Finger receptor dysfunction in dental technicians exposed to high frequency vibration. Scand J Work Environ Health 15:339-344, 1989.

Hansson HA, Dahlin LB, Löwenadler B, Lundborg G, Paleus S and Skottner A: Transient increase in insulin-like growth factor I immunoreactivity in rat peripheral nerves exposed to vibrations. Acta Physiol Scand. 132: 35-41, 1988.

Lundborg G, Necking L-E, Sollerman C and Strömberg T: Tidig diagnostik av vibrations-skador möjligt med nyutvecklade screeningmetoder. Läkartidningen 84, No. 9, 606-608, 1987.

Lundborg G, Dahlin LB, Danielsen N, Hansson HA and Pykkö I: Intraneural edema following exposure to vibration. Scand J Work Environ Health 13: 326-329, 1987.

Lundborg G, Sollerman C, Strömberg T, Pykkö I and Rosén B: A new principle for assessment of vibrotactile sense in vibration-induced neuropathy. Scand J Work Environ Health 13: 375-379, 1987.

Brammer AJ, Taylor W, Lundborg G: Sensory-neural stages of vibration-induced white fingers. Scand J Work Environ Health 13: 279-283, 1987.

Lundborg G, Sollerman C and Lie-Stenström A-K: Digital vibrogram - a new diagnostic tool for sensory testing in compression neuropathy. J Hand Surg 11-A: 693-699, 1986.

Lundborg G and Sollerman C: Domnade fingrar och klinisk diagnostik. - Handkirurgiska synpunkter. Läkartidningen Vol. 81, No. 37, pp 3220-3223, 1984.74.