ShearWave™ Elastography for Thyroid and Neck Imaging
Peer Reviewed Articles

Thyroid

1. **First experience of comparisons between two different shear wave speed imaging systems in differentiating malignant from benign thyroid nodules.** He YP, Xu HX, Wang D, Li XL, Ren WW, Zhao CK, Bo XW, Liu BJ, Yue WW. Clin Hemorheol Microcirc. 2016 Dec 14.
2. **Shear-Wave Elastography for Papillary Thyroid Carcinoma can Improve Prediction of Cervical Lymph Node Metastasis.** Park AY, Kim JA, Son EJ, Youk JH. Ann Surg Oncol. 2016 Sep 21.
3. **Shear wave elastography diagnosis of the diffuse sclerosing variant of papillary thyroid carcinoma: A case report.** Xue N, Xu Y, Huang P, Zhang S, Wang H, Yu F. Mol Clin Oncol. 2016 Aug;5(2):333-336.
4. **The influence of precompression on elasticity of thyroid nodules estimated by ultrasound shear wave elastography.** Lam AC, Pang SW, Ahuja AT, Bhatia KS. Eur Radiol. 2016 Aug;26(8):2845-52.
5. **Impact of Image Orientation on Measurements of Thyroid Nodule Stiffness Using Shear Wave Elastography.** Gangadhar K, Hippe DS, Thiel J, Dighe M. J Ultrasound Med. 2016 Aug;35(8):1661-7.
6. **Feasibility Study of Texture Analysis Using Ultrasound Shear Wave Elastography to Predict Malignancy in Thyroid Nodules.** Bhatia KS, Lam AC, Pang SW, Wang D, Ahuja AT. Ultrasound Med Biol. 2016 Jul;42(7):1671-80.
7. **Reliability of Shear-Wave Elastography Estimates of the Young Modulus of Tissue in Follicular Thyroid Neoplasms.** Anvari A, Dhyani M, Stephen AE, Samir AE. AJR Am J Roentgenol. 2016 Mar;206(3):609-16.
8. **Diagnostic value of two-dimensional shear wave elastography in papillary thyroid microcarcinoma.** Duan SB, Yu J, Li X, Han ZY, Zhai HY, Liang P. Onco Targets Ther. 2016 Mar 9;9:1311-7.
9. **Value of thyroid imaging reporting and data system and shear wave elastography for diagnosis of thyroid microcarcinoma.** Lu X, Zhang Y, Liu Y, Zhang N, Zhang C. Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2016 Jan;30(2):118-22.
10. **Shear wave elastography in medullary thyroid carcinoma diagnostics.** Dobruch-Sobczak K, Gumińska A, Bakuła-Zalewska E, Mlosek K, Słapa RZ, Wareluk P, Krauze A, Ziemiecka A, Migda B, Jakubowski W, Dedecjus M. J Ultrason. 2015 Dec;15(63):358-67.
11. **Comparison of Diagnostic Accuracy of Real-Time Elastography and Shear Wave Elastography in Differentiation Malignant From Benign Thyroid Nodules.** Tian W, Hao S, Gao B, Jiang Y, Zhang S, Gu L, Luo D. Medicine (Baltimore). 2015 Dec;94(52):e2312.
12. **Variability in Stiffness Assessment in a Thyroid Nodule Using Shear Wave Imaging.** Brezak R, Hippe D, Thiel J, Dighe MK. Ultrasound Q. 2015 Dec;31(4):243-9.

13. **Shear-Wave Elastography for the Preoperative Risk Stratification of Follicular-patterned Lesions of the Thyroid: Diagnostic Accuracy and Optimal Measurement Plane.** Samir AE, Dhyani M, Anvari A, Prescott J, Halpern EF, Faquin WC, Stephen A. Radiology. 2015 Nov;277(2):565-73.
14. **Shear Wave Elastography in the Diagnosis of Thyroid Nodules with Coexistent Chronic Autoimmune Hashimoto's Thyroiditis.** Liu B, Liang J, Zhou L, Lu Y, Zheng Y, Tian W, Xie X. Otolaryngol Head Neck Surg. 2015 Nov;153(5):779-85
15. **Real-time shear wave elastography may predict autoimmune thyroid disease.** Vlad M, Golu I, Bota S, Vlad A, Timar B, Timar R, Sporea I. Wien Klin Wochenschr. 2015 May;127(9-10):330-6.
16. **Shear wave elastography of thyroid nodules for the prediction of malignancy in a large scale study.** Park AY, Son EJ, Han K, Youk JH, Kim JA, Park CS. Eur J Radiol. 2015 Mar;84(3):407-12.
17. **Two-dimensional shear wave elastography as promising diagnostic tool for predicting malignant thyroid nodules: a prospective single-centre experience.** Liu B, Liang J, Zheng Y, Xie X, Huang G, Zhou L, Wang W, Lu M. Eur Radiol. 2015 Mar;25(3):624-34.
18. **Shear Wave Elastography in Evaluation of Cervical Lymph Node Metastasis of Papillary Thyroid Carcinoma: Elasticity Index as a Prognostic Implication.** Jung WS, Kim JA, Son EJ, Youk JH, Park CS. Ann Surg Oncol. 2015 Jan;22(1):111-6.
19. **Diagnostic performance of shear wave elastography in the identification of malignant thyroid nodules: a meta-analysis.** Lin P, Chen M, Liu B, Wang S, Li X. Eur Radiol. 2014 Nov;24(11):2729-38.
20. **Biochemical and ultrasonographic parameters influencing thyroid nodules elasticity.** Szczepanek-Parulska E, Woliński K, Stangierski A, Gurgul E, Ruchała M. Endocrine. 2014 Nov;47(2):519-27.
21. **Application of shear wave elastography in fine needle aspiration biopsy for thyroid nodule.** Ma BY, Parajuly SS, Ying SX, Lan PY. J Pak Med Assoc. 2014 Aug;64(8):954-7.
22. **Metastases of renal clear-cell carcinoma to the thyroid - a comparison of shear-wave and quasi-static elastography.** Adamczewski Z, Dedecjus M, Skowrońska-Jóźwiak E, Lewiński A. Pol Arch Med Wewn. 2014;124(9):485-6.
23. **Shear wave elastography versus real-time elastography on evaluation thyroid nodules: a preliminary study.** Liu BX, Xie XY, Liang JY, Zheng YL, Huang GL, Zhou LY, Wang Z, Xu M, Lu MD. Eur J Radiol. 2014 Jul;83(7):1135-43.
24. **How to select nodules for fine-needle aspiration biopsy in multinodular goitre. Role of conventional ultrasonography and shear wave elastography - a preliminary study.** Woliński K, Szczepanek-Parulska E, Stangierski A, Gurgul E, Rewaj-Łosyk M, Ruchała M. Endokrynol Pol. 2014;65(2):114-8.
25. **Diagnostic role of conventional ultrasonography and shearwave elastography in asymptomatic patients with diffuse thyroid disease: initial experience with 57 patients.** Kim I, Kim EK, Yoon JH, Han KH, Son EJ, Moon HJ, Kwak JY. Yonsei Med J. 2014 Jan 1;55(1):247-53.
26. **Shear wave elastography for differentiation of benign and malignant thyroid nodules: a meta-analysis.** Zhang B, Ma X, Wu N, Liu L, Liu X, Zhang J, Yang J, Niu T. J Ultrasound Med. 2013 Dec;32(12):2163-9.

27. **Comparison of diagnostic value of conventional ultrasonography and shear wave elastography in the prediction of thyroid lesions malignancy.** Szczepanek-Parulska E, Woliński K, Stangierski A, Gurgul E, Biczysko M, Majewski P, Rewaj-Łosyk M, Ruchała M. PLoS One. 2013 Nov 29;8(11):e81532.

28. **Quantitative assessment of shear-wave ultrasound elastography in thyroid nodules: diagnostic performance for predicting malignancy.** Kim H, Kim JA, Son EJ, Youk JH. Eur Radiol. 2013 Sep;23(9):2532-7.

29. **Quantitative shear wave elastography as a prognostic implication of papillary thyroid carcinoma (PTC): elasticity index can predict extrathyroidal extension (ETE).** Park YJ, Kim JA, Son EJ, Youk JH, Park CS. Ann Surg Oncol. 2013 Aug;20(8):2765-71.

30. **A threshold value in Shear Wave elastography to rule out malignant thyroid nodules: a reality?** Veyrieres JB, Albarel F, Lombard JV, Berbis J, Sebag F, Oliver C, Petit P. Eur J Radiol. 2012 Dec;81(12):3965-72.

31. **Shear wave elastography of thyroid nodules in routine clinical practice: preliminary observations and utility for detecting malignancy.** Bhatia KS, Tong CS, Cho CC, Yuen EH, Lee YY, Ahuja AT. Eur Radiol. 2012 Nov;22(11):2397-406.

32. **Shear wave elastography in the diagnosis of thyroid nodules: feasibility in the case of coexistent chronic autoimmune Hashimoto's thyroiditis.** Magri F, Chytiris S, Capelli V, Alessi S, Nalon E, Rotondi M, Cassibba S, Calliada F, Chiovato L. Clin Endocrinol (Oxf). 2012 Jan;76(1):137-41.

33. **Shear wave elastography may add a new dimension to ultrasound evaluation of thyroid nodules: case series with comparative evaluation.** Slapa RZ, Piwowonski A, Jakubowski WS, Bierca J, Szopinski KT, Slowinska-Srzednicka J, Migda B, Mlosek RK. J Thyroid Res. 2012;2012:657147.

34. **Quantitative assessment of normal soft-tissue elasticity using shear-wave ultrasound elastography.** Arda K, Ciledag N, Aktas E, Aribas BK, Köse K. AJR Am J Roentgenol. 2011 Sep;197(3):532-6.

35. **Ultrasound, elastography, and fluorodeoxyglucose positron emission tomography/computed tomography imaging in Riedel's thyroiditis: report of two cases.** Slman R, Monpeyssen H, Desarnaud S, Haroche J, Fediaevsky Ldu P, Fabrice M, Seret-Begue D, Amoura Z, Aurengo A, Leenhardt L. Thyroid. 2011 Jul;21(7):799-804.

36. **Shear wave elastography: possibilities of the differential diagnosis of focal and diffuse changes in various organs and tissues.** Postnova NA, Vasil'ev AIu, Zykin BI, Pavlinova ES, Vykliuk MV. Vestn Rentgenol Radiol. 2011 Mar-Jun;(2):29-34.

37. **Shear Wave Elastography: A New Ultrasound Imaging Mode for the Differential Diagnosis of Benign and Malignant Thyroid Nodules.** Sebag F, Vaillant-Lombard J, Berbis J, Griset V, Henry JF, Petit P, Oliver C. J Clin Endocrinol Metab. 2010 Dec;95(12):5281-8.

Neck

1. **Shear wave elastography using ultrasound: effects of anisotropy and stretch stress on a tissue phantom and in vivo reactive lymph nodes in the neck.** Lee HY, Lee JH, Shin JH, Kim SY, Shin HJ, Park JS, Choi YJ, Baek JH. Ultrasonography. 2016 Jun 8. doi: 10.14366/usg.16003.
2. **Shear Wave Elastography in Head and Neck Lymph Node Assessment: Image Quality and Diagnostic Impact Compared with B-Mode and Doppler Ultrasonography.** Desmots F, Fakhry N, Mancini J, Reyre A, Vidal V, Jacquier A, Santini L, Moulin G, Varoquaux A. Ultrasound Med Biol. 2016 Feb;42(2):387-98.
3. **Shear Wave Elastography - A New Quantitative Assessment of Post-Irradiation Neck Fibrosis.** Liu KH, Bhatia K, Chu W, He LT, Leung SF, Ahuja AT. 2015 Aug;36(4):348-54.
4. **Sonoelastography--a useful adjunct for parotid gland ultrasound assessment in patients suffering from chronic inflammation.** Wierzbicka M, Kałużny J, Ruchała M, Stajgis M, Kopeć T, Szyfter W. Med Sci Monit. 2014 Nov 15;20:2311-7.
5. **Shear wave elastography: a new noninvasive tool to assess the intensity of fibrosis of irradiated salivary glands in head and neck cancer patients.** Kałużny J, Kopeć T, Szczepanek-Parulska E, Stangierski A, Gurgul E, Ruchała M, Milecki P, Wierzbicka M. Biomed Res Int. 2014;2014:157809.
6. **Quantitative shear wave elastography in the evaluation of metastatic cervical lymph nodes.** Choi YJ, Lee JH, Lim HK, Kim SY, Han MW, Cho KJ, Baek JH. Ultrasound Med Biol. 2013 Jun;39(6):935-40.
7. **Reliability of shear wave ultrasound elastography for neck lesions identified in routine clinical practice.** Bhatia K, Tong CS, Cho CC, Yuen EH, Lee J, Ahuja AT. Ultraschall Med. 2012 Oct;33(5):463-8.
8. **A pilot study evaluating real-time shear wave ultrasound elastography of miscellaneous non-nodal neck masses in a routine head and neck ultrasound clinic.** Bhatia KS, Yuen EH, Cho CC, Tong CS, Lee YY, Ahuja AT. Ultrasound Med Biol. 2012 Jun;38(6):933-42.
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10. **Shear wave elastography of focal salivary gland lesions: preliminary experience in a routine head and neck US clinic.** Bhatia KS, Cho CC, Tong CS, Lee YY, Yuen EH, Ahuja AT. Eur Radiol. 2012 May;22(5):957-65.

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