Peer Reviewed Articles Published on ShearWave™ Elastography and UltraFast™ Doppler in Other Applications

Obstetrics and Gynecology

1. **Placental elastography in a murine intrauterine growth restriction model.** Quibel T, Deloison B, Chammings F, Chalouhi G, Siauve N, Alison M, Bessières B, Gennisson JL, Clément O, Salomon LJ. Prenat Diagn. 2015 Nov;35(11):1106-11
2. **Feasibility and reproducibility of ShearWave™ elastography of fetal baboon organs.** Quarello E, Lacoste R, Mancini J, Melot-Dusseau S, Gorincour G. Prenat Diagn. 2015 Nov;35(11):1112-6.
3. **In Vivo Evaluation of Cervical Stiffness Evolution during Induced Ripening Using Shear Wave Elastography, Histology and 2 Photon Excitation Microscopy: Insight from an Animal Model.** Peralta L, Mourier E, Richard C, Charpigny G, Larcher T, Aït-Belkacem D, Balla NK, Brasselet S, Tanter M, Muller M, Chavatte-Palmer P. PLoS One. 2015 Aug 28;10(8):e0133377.
4. **Shear wave elastography of placenta: in vivo quantitation of placental elasticity in preeclampsia.** Kılıç F, Kayadibi Y, Yüksel MA, Adaletli İ, Ustabaşıoğlu FE, Öncül M, Madazlı R, Yılmaz MH, Mihmanlı İ, Kantarcı F. Diagn Interv Radiol. 2015 May-Jun;21(3):202-7.
5. **Shear waves elastography of the placenta in pregnant baboon.** Quarello E, Lacoste R, Mancini J, Melot-Dusseau S, Gorincour G. Gynecol Obstet Fertil. 2015 Mar;43(3):200-4.
6. **Quantification of elasticity changes in the myometrium during labor using Supersonic Shear Imaging: a feasibility study.** Gennisson JL, Muller M, Gabor P, Frydman R, Musset D, Tanter M, Ami O. Ultrasonics. 2015 Feb;56:183-8.
7. **Effect of depth on shear-wave elastography estimated in the internal and external cervical os during pregnancy.** Hernandez-Andrade E, Aurioles-Garibay A, Garcia M, Korzeniewski SJ, Schwartz AG, Ahn H, Martinez-Varea A, Yeo L, Chaiworapongsa T, Hassan SS, Romero R. J Perinat Med. 2014 Sep;42(5):549-57.
8. **Quantitative sonoelastography of the uterine cervix prior to induction of labor as a predictor of cervical dilation time.** Hee L, Rasmussen CK, Schlütter JM, Sandager P, Uldbjerg N. Acta Obstet Gynecol Scand. 2014 Jul;93(7):684-90.
9. **Detection of placenta elasticity modulus by quantitative real-time shear wave imaging.** Li WJ, Wei ZT, Yan RL, Zhang YL. Clin Exp Obstet Gynecol. 2012;39(4):470-3.

Cardiovascular

1. **Cardiac shear-wave elastography using a transesophageal transducer: application to the mapping of thermal lesions in ultrasound transesophageal cardiac ablation.** Kwiecinski W, Bessière F, Colas EC, Apoutou N'Djin W, Tanter M, Lafon C, Pernot M. Phys Med Biol. 2015 Sep 25;60(20):7829-7846.
2. **Shear Wave Elastography May Be Superior to Greyscale Median for the Identification of Carotid Plaque Vulnerability: A Comparison with Histology.** Garrard JW, Ummur P, Nduwayo S, Kanber B, Hartshorne TC, West KP, Moore D, Robinson TG, Ramnarine KV. Ultraschall Med. 2015 Aug;36(4):386-90.

3. **UltraFast Doppler ultrasonography for hepatic vessels of liver recipients: preliminary experiences.** Hur BY, Lee JY, Chu AJ, Kim SH, Han JK, Choi BI. Ultrasonography. 2015 Jan;34(1):58-65

4. **Shear wave elastography imaging of carotid plaques: feasible, reproducible and of clinical potential.** Ramnarine KV, Garrard JW, Kanber B, Nduwayo S, Hartshorne TC, Robinson TG. Cardiovasc Ultrasound. 2014 Dec 8;12:49.

5. **Ultrafast Doppler reveals the mapping of cerebral vascular resistivity in neonates.** Demené C, Pernot M, Biran V, Alison M, Fink M, Baud O, Tanter M. J Cereb Blood Flow Metab. 2014 Jun;34(6):1009-17.

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7. **Shear-wave elastography in carotid plaques: comparison with grayscale median and histological assessment in an interesting case.** Garrard JW, Ramnarine K. Ultraschall Med. 2014 Feb;35(1):1-3.

8. **Shear wave elastography assessment of carotid plaque stiffness: in vitro reproducibility study.** Ramnarine KV, Garrard JW, Dexter K, Nduwayo S, Panerai RB, Robinson TG. Ultrasound Med Biol. 2014 Jan;40(1):200-9.

9. **Arterial wall elasticity: State of the art and future prospects.** Messas E, Pernot M, Couade M. Diagn Interv Imaging. 2013 May;94(5):561-9.

10. **Shear wave elastography quantification of blood elasticity during clotting.** Bernal M, Gennisson JL, Flaud P, Tanter M. Ultrasound Med Biol. 2012 Dec;38(12):2218-28.

11. **Mapping Myocardial Fiber Orientation using Echocardiography-Based Shear Wave Imaging.** W-L Lee, M Pernot, M Couade, E Messas, A Hagege, M Fink, A Bel, P Bruneval, M Tanter. IEEE Trans Med Imaging. 2011 Oct 19.

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14. **Quantitative assessment of arterial wall biomechanical properties using shear wave imaging.** Couade M, Pernot M, Prada C, Messas E, Emmerich J, Bruneval P, Criton A, Fink M, Tanter M. Ultrasound Med Biol. 2010 Oct;36(10):1662-76.

Eye, Cornea

1. **Evaluation of iridociliary and lenticular elasticity using shear-wave elastography in rabbit eyes.** Detorakis ET, Drakonaki EE, Ginis H, Karyotakis N, Pallikaris IG. Acta Medica (Hradec Kralove). 2014;57(1):9-14.

2. **Supersonic shear wave elastography for the in vivo evaluation of transepithelial corneal collagen cross-linking.** Touboul D, Gennisson JL, Nguyen TM, Robinet A, Roberts CJ, Tanter M, Grenier N. Invest Ophthalmol Vis Sci. 2014 Mar 28;55(3):1976-84.

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4. **Assessment of viscous and elastic properties of sub-wavelength layered soft tissues using Shear Wave Spectroscopy: theoretical framework and in vitro experimental validation.** IEEE Transactions on Ultrasonics. Nguyen T.-M., Couade M., Bercoff J., Tanter M. 2011

5. **High-Resolution Quantitative Imaging of Cornea High-Resolution Quantitative Imaging of Cornea Elasticity Using Supersonic Shear Imaging, M.** Tanter, D. Touboul, JL. Gennisson, J. Bercoff, and M. Fink, IEEE Transactions on Medical Imaging, vol. 28, no. 12, December 2009

Brain

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3. **In Vivo Measurement of Brain Tumor Elasticity Using Intraoperative Shear Wave Elastography.** Chauvet D, Imbault M, Capelle L, Demene C, Mossad M, Karachi C, Boch AL, Gennisson JL, Tanter M. Ultraschall Med. 2015 Apr 15.

4. **A novel technique of detecting MRI-negative lesion in focal symptomatic epilepsy: intraoperative ShearWave elastography.** Chan HW, Pressler R, Uff C, Gunny R, St Piers K, Cross H, Bamber J, Dorward N, Harkness W, Chakraborty A. Epilepsia. 2014 Apr;55(4):e30-3.

5. **Targeting accuracy of transcranial magnetic resonance-guided high-intensity focused ultrasound brain therapy: a fresh cadaver model.** Chauvet D, Marsac L, Pernot M, Boch AL, Guillevin R, Salameh N, Souris L, Darrasse L, Fink M, Tanter M, Aubry JF. J Neurosurg. 2013 May;118(5):1046-52.

6. **MR-guided adaptive focusing of therapeutic ultrasound beams in the human head.** Marsac L, Chauvet D, Larrat B, Pernot M, Robert B, Fink M, Boch AL, Aubry JF, Tanter M. Med Phys. 2012 Feb;39(2):1141-9.

7. **Transcranial ultrasonic therapy based on time reversal of acoustically induced cavitation bubble signature.** Gâteau J, Marsac L, Pernot M, Aubry JF, Tanter M, Fink M. IEEE Trans Biomed Eng. 2010 Jan;57(1):134-44.

Scrotum & Penis

1. **Shear-wave elastography of the testis in the healthy man - determination of standard values.** Trottmann M, Marcon J, D'Anastasi M, Bruce MF, Stief CG, Reiser MF, Buchner A, Clevert DA. Clin Hemorheol Microcirc. 2016;62(3):273-81.

2. **An experimental study: quantitatively evaluating the change of the content of collagen fibres in penis with two-dimensional ShearWave™ Elastography.** Qiao XH, Zhang JJ, Gao F, Li F, Bai M, Du LF, Xing JF. Andrologia. 2016 Jul 12. doi: 10.1111/and.12653.

3. **Utility of Real-Time Shear Wave Elastography in the Assessment of Testicular Torsion.** Sun Z, Xie M, Xiang F, Song Y, Yu C, Zhang Y, Ramdhany S, Wang J. PLoS One. 2015 Sep 18;10(9):e0138523.

4. **Shear wave elastography (SWE) is reliable method for testicular spermatogenesis evaluation after torsion.** Zhang X, Lv F, Tang J. Int J Clin Exp Med. 2015 May 15;8(5):7089-97.

5. **A new method of measuring the stiffness of corpus cavernosum penis with ShearWave™ Elastography.** Zhang JJ, Qiao XH, Gao F, Li F, Bai M, Zhang HP, Liu Y, Du LF, Xing JF. Br J Radiol. 2015 Apr;88(1048):20140671.
6. **Smooth Muscle Cells of Penis in the Rat: Noninvasive Quantification with Shear Wave Elastography.** Zhang JJ, Qiao XH, Gao F, Bai M, Li F, Du LF, Xing JF. Biomed Res Int. 2015;2015:595742.
7. **Penile sonoelastography for the localization of a non-palpable, non-sonographically visualized lesion in a patient with penile curvature from Peyronie's disease.** Richards G, Goldenberg E, Pek H, Gilbert BR. J Sex Med. 2014 Feb;11(2):516-20.
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