Title	Journal	Link	Publication date	References	Top Paper
Ultra-High Frequency Ultrasound, A Promising Diagnostic Technique: Review of the Literature and Single-Center Experience	Canadian Association of Radiologists Journal	https://doi.org/10.1177/0846537120940684	2020	Rossana, Izzetti, Saverio, Vitali, Giacomo, Aringhieri, Marco, Nisi, Teresa, Oranges, Valentina, Dini, Francesco, Ferro, Chiara, Baldini, Marco, Romanelli, Davide, Caramella, Mario, Gabriele	Yes
Vascular Health and Early Atherosclerosis in Childhood Cancer Survivors: Reassuring Findings From Comprehensive Noninvasive Assessment	JACC: Advances	https://doi.org/10.1016/j.jacadv.2025.102349	2026	Emmanuelle, Fournier, Raphael, Joye, Alice, Pozza, Wei, Hui, Mark K., Friedberg, Emily, Lam, Kyle, Runeckles, Marisa, Signorile, Steve, Fan, Brian, McCrindle, Luc, Mertens, Paul C., Nathan	No
Validity of ultrasound-guided identification of dilated lymphatic vessels to detect early breast cancer-related lymphedema	Archives of Plastic Surgery	https://doi.org/10.1055/a-2780-6493	2026	Akitatsu, Hayashi, Takeo, Fujiwara	No
Tomographic ultrasound for three-dimensional visualization of temporal arteries	Scandinavian Journal of Rheumatology	https://doi.org/10.1080/03009742.2024.2320585	2024	M., Naumovska, U., Dahlstrand, L., Engqvist, M., Cinthio, J., Albinsson, R., Sheikh, A., Merdasa, M., Malmsjo	No
Quantitative ultrasound and photoacoustic assessments of red blood cell aggregation in the human radial artery	Photoacoustics	https://doi.org/10.1016/j.pacs.2025.100711	2025	Taehoon, Bok, Eno, Hysi, Michael C., Kolios	No
Investigating the presence and detectability of structural peripheral arterial changes in children with well-regulated type 1 diabetes versus healthy controls using ultra-high frequency ultrasound: a single-centre cross-sectional and case-control study	eClinicalMedicine	https://doi.org/10.1016/j.eclinm.2025.103097	2025	Ebba, Bergdahl, Gun, Forsander, Frida, Sundberg, Linda, Milkovic, Frida, Dangardt	No
Impact of kidney function on stiffness of small conduit arteries in hypertension and obesity	Journal of Hypertension	https://doi.org/10.1097/HJH.0000000000003957	2025	Diego, Moriconi, Monica, Nannipieri, Smriti, Badhwar, Stefano, Taddei, Pierre, Boutouyrie, Rosa Maria, Bruno	No
Vascular structure and stiffness in pediatric Mulibrey nanism using ultra-high frequency ultrasound	Veins and Lymphatics	https://doi.org/10.4081/vl.2023.11826	2023	Taisto, Sarkola, Marita, Lipsanen-Nyman, Hannu, Jalanko, Eero, Jokinen	No
Tube-in-Tube Phalloplasty with Tailor-made Bilateral Superficial Circumflex Iliac Artery Perforator Flaps Using Preoperative High-resolution Ultrasound	Plastic and Reconstructive Surgery - Global Open	https://doi.org/10.1097/GOX.0000000000005280	2023	Hidehiko, Yoshimatsu, Ryo, Karakawa, Yuma, Fuse, Tomoyuki, Yano	No
Deep Fat Saving Elevation of the Superficial Circumflex Iliac Artery Perforator Flap	Medicina (Lithuania)	https://doi.org/10.3390/medicina58050670	2022	Yuma, Fuse, Hidehiko, Yoshimatsu, Ryo, Karakawa, Tomoyuki, Yano	No

Title	Journal	Link	Publication date	References	Top Paper
Ultrasound centre frequency shifts as a novel approach for diagnosing giant cell arteritis	Scandinavian Journal of Rheumatology	https://doi.org/10.1080/03009742.2022.2056979	2022	M., Naumovska, R., Sheikh, J., Albinsson, B., Hammar, U., Dahlstrand, M., Malmjsö, T., Erlöv	No
Arterial health during early childhood following abnormal fetal growth	BMC Pediatrics	https://doi.org/10.1186/s12887-021-02951-2	2022	Rasmus F.W., Olander, Johnny K.M., Sundholm, Sanna, Suonsyrjä, Taisto, Sarkola	No
Validation and Feasibility of an Automated System for the Assessment of Vascular Structure and Mechanical Properties in the Digital Arteries: An Ultrahigh-Frequency Ultrasound Study	Ultrasound in Medicine and Biology	https://doi.org/10.1016/j.ultrasmedbio.2021.12.008	2022	Federica, Poli, Catherine, Fortier, Hakim, Khettab, Francesco, Faita, Saverio, Vitali, Giacomo, Aringhieri, Lorenzo, Ghiadoni, Stefano, Taddei, Laurence, Amar, Aurelien, Lorthioir, Pierre, Boutouyrie, Rosa Maria, Bruno	No
Assessing mechanical vibration-altered wall shear stress in digital arteries	Journal of Biomechanics	https://doi.org/10.1016/j.jbiomech.2021.110893	2022	Christophe, Noël, Nicla, Settembre	No
Ideal cardiovascular health and vascular phenotype associations in mothers with obesity and their six-year-old children	Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy	https://doi.org/10.2147/DMSO.S315402	2021	Linda, Litwin, Johnny K.M., Sundholm, Jelena, Meinilä, Janne, Kulmala, Tuija H., Tammelin, Kristiina, Rönö, Saila B., Koivusalo, Johan G., Eriksson, Taisto, Sarkola	No
Photoacoustic imaging of the spatial distribution of oxygen saturation in an ischemia-reperfusion model in humans	Biomedical Optics Express	https://doi.org/10.1364/boe.418397	2021	Aboma, Merdasa, Josefine, Bunke, Magdalena, Naumovska, John, Albinsson, Tobias, Erlöv, Magnus, Cinthio, Nina, Reistad, Rafi, Sheikh, Malin, Malmsjö	No
In vivo photoacoustic assessment of the oxygen saturation changes in the human radial artery: a preliminary study associated with age	Journal of Biomedical Optics	https://doi.org/10.1117/1.jbo.26.3.036006	2021	Taehoon, Bok, Eno, Hysi, Michael C., Kolios	No
Photoacoustic imaging for non-invasive examination of the healthy temporal artery – systematic evaluation of visual function in healthy subjects	Acta Ophthalmologica	https://onlinelibrary.wiley.com/doi/10.1111/aos.14566	2021	Rafi, Sheikh, Björn, Hammar, Magdalena, Naumovska, Ulf, Dahlstrand, Bodil, Gesslein, Tobias, Erlöv, Magnus, Cinthio, Malin, Malmsjö	No
Clinical effectiveness and radial artery remodeling assessment via very-high-frequency ultrasound/ultra biomicroscopy after applying slender 7Fr sheath for transradial approach in left main bifurcation disease	Current Medical Research and Opinion	https://doi.org/10.1080/03007995.2020.1815684	2020	Yingkai, Xu, Yingkai, Li, Hua, Shen, Beibei, Zhang, Qi, Zhao, Yujing, Cheng, Ziwei, Zhao, Qianyun, Guo, Jiaqi, Yang, Yujie, Zhou	No
Motivational Interview to improve vascular health in Adolescents with poorly controlled type 1 Diabetes (MIAD): a randomized controlled trial	BMJ open diabetes research & care	https://doi.org/10.1136/bmjdrc-2020-001216	2020	Mari Anne, Pulkkinen, Anna Kaisa, Tuomaala, Matti, Hero, Daniel, Gordin, Taisto, Sarkola	No

Title	Journal	Link	Publication date	References	Top Paper
Early Arterial Intimal Thickening and Plaque Is Related with Treatment Regime and Cardiovascular Disease Risk Factors in Young Adults Following Childhood Hematopoietic Stem Cell Transplantation	Journal of Clinical Medicine	https://doi.org/10.3390/jcm9072208	2020	Johnny, Sundholm, Anu, Suominen, Taisto, Sarkola, Kirsi, Jahnukainen	No
Long-term renal prognosis and risk for hypertension after myeloablative therapies in survivors of childhood high-risk neuroblastoma: A nationwide study	Pediatric Blood & Cancer	https://onlinelibrary.wiley.com/doi/abs/10.1002/pbc.28209	2020	Anu, Suominen, Timo, Jahnukainen, Tiina H., Ojala, Taisto, Sarkola, Maila, Turanlahti, Ulla M., Saarinen-Pihkala, Kirsi, Jahnukainen	No
Diagnostic performance and utility of very high-resolution ultrasonography in diagnosing giant cell arteritis of the temporal artery	Rheumatology Advances in Practice	https://academic.oup.com/rheumap/article/doi/10.1093/rap/rkz018/5528503	2019	Johnny K M, Sundholm, Tom, Pettersson, Anders, Paetau, Anders, Albäck, Taisto, Sarkola	No
Maternal obesity and gestational diabetes: Impact on arterial wall layer thickness and stiffness in early childhood - RADIEL study six-year follow-up	Atherosclerosis	https://doi.org/10.1016/j.atherosclerosis.2019.01.037	2019	Johnny K.M., Sundholm, Linda, Litwin, Kristiina, Rönö, Saila B., Koivusalo, Johan G., Eriksson, Taisto, Sarkola	No
Feasibility and precision of transcutaneous very-high resolution ultrasound for quantification of arterial structures in human neonates – Comparison with conventional high resolution vascular ultrasound imaging	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2015.02.016	2015	Johnny K.M., Sundholm, Rasmus F.W., Olander, Tiina H., Ojala, Sture, Andersson, Taisto, Sarkola	No
Semi-automatic border detection software for the quantification of arterial lumen, intima-media and adventitia layer thickness with very-high resolution ultrasound	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2014.03.006	2014	Johnny, Sundholm, Tomas, Gustavsson, Taisto, Sarkola	No
Transcutaneous very-high resolution ultrasound for the quantification of carotid arterial intima-media thickness in children – Feasibility and comparison with conventional high resolution vascular ultrasound imaging	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2012.06.054	2012	Taisto, Sarkola, Cameron, Slorach, Wei, Hui, Timothy J., Bradley, Andrew N., Redington, Edgar, Jaeggi	No
Non-Invasive Vascular Very-High Resolution Ultrasound to Quantify Artery Intima Layer Thickness: Validation of the Four-Line Pattern	Ultrasound in Medicine & Biology	https://linkinghub.elsevier.com/retrieve/pii/S0301562919301747	2019	Johnny K.M., Sundholm, Anders, Paetau, Anders, Albäck, Tom, Pettersson, Taisto, Sarkola	No
Diagnostic performance and utility of very high-resolution ultrasonography in diagnosing giant cell arteritis of the temporal artery	Rheumatology Advances in Practice	https://academic.oup.com/rheumap/article/doi/10.1093/rap/rkz018/5528503	2019	Johnny K M, Sundholm, Tom, Pettersson, Anders, Paetau, Anders, Albäck, Taisto, Sarkola	No

Title	Journal	Link	Publication date	References	Top Paper
Advanced ultrasound techniques for pediatric imaging	Pediatrics	https://doi.org/10.1542/peds.2018-2609	2019	Misun, Hwang, Maclej, Piskunowicz, Kassa, Darge	No
Radial artery remodeling following transradial percutaneous coronary intervention in men and women: insights from serial ultrahigh frequency ultrasonography	Cardiovascular Revascularization Medicine	https://doi.org/10.1016/j.carrev.2019.05.006	2019	Wayne, Batchelor, Vishal, Dahya, Behnam, Tehrani, Abdulla, Damluji, Matthew, Sherwood, Scott, Barnett, Kelly, Epps, Alexander, Truesdell, Nadim, Geloo, John, Katopodis, William, Dixon, Shahram, Yazdani, Thomas, Noel	No
Maternal obesity and gestational diabetes: Impact on arterial wall layer thickness and stiffness in early childhood - RADIEL study six-year follow-up	Atherosclerosis	https://linkinghub.elsevier.com/retrieve/pii/S0021915019300644	2019	Johnny K.M., Sundholm, Linda, Litwin, Kristiina, Rönö, Saila B., Koivusalo, Johan G., Eriksson, Taisto, Sarkola	No
The 'ALSPAC in London' dataset: adiposity, cardiometabolic risk profiles, and the emerging arterial phenotype in young adulthood	Wellcome Open Research	https://wellcomeopenresearch.org/articles/3-162/v1	2018	Scott T., Chiesa, Alicja, Rapala, Marietta, Charakida, Kaitlin H., Wade, Nicholas J., Timpson, John E., Deanfield	No
Clinical translation of a novel photoacoustic imaging system for examining the temporal artery	IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control	https://ieeexplore.ieee.org/document/8466655/	2018	Rafi, Sheikh, Magnus, Cinthio, Ulf, Dahlstrand, Tobias, Erlov, Magdalena, Naumovska, Bjorn, Hammar, Sophia, Zackrisson, Tomas, Jansson, Nina, Reistad, Malin, Malmsjo	No
Photoacoustic Oxygenation Quantification in Patients with Raynaud's: First-in-Human Results	Ultrasound in Medicine and Biology	https://doi.org/10.1016/j.ultrasmedbio.2018.04.017	2018	John R., Eisenbrey, Maria, Stanczak, Flemming, Forsberg, Fabian A., Mendoza-Ballesteros, Andrej, Lyshchik	No
Intimal and medial arterial changes defined by ultra-high-frequency ultrasound: Response to changing risk factors in children with chronic kidney disease	PLOS ONE	http://dx.plos.org/10.1371/journal.pone.0198547	2018	Frida, Dangardt, Marietta, Charakida, Scott, Chiesa, Devina, Bhowruth, Alicja, Rapala, Daniela, Thurn, Franz, Schaefer, John, Deanfield, Rukshana, Shroff	No
High birth weight was associated with increased radial artery intima thickness but not with other investigated cardiovascular risk factors in adulthood	Acta Paediatrica	http://doi.wiley.com/10.1111/apa.14414	2018	I W, Johnsson, T, Naessén, F, Ahlsson, J, Gustafsson	No
Ultrahigh-resolution ultrasound characterization of access site trauma and intimal hyperplasia following use of a 7F sheathless guide versus 6F sheath/guide combination for transradial artery PCI: Results of the PRAGMATIC trial	American Heart Journal	https://doi.org/10.1016/j.ahj.2017.11.017	2018	Wayne, Batchelor, Vishal, Dahya, Dan, McGee, John, Katopodis, William, Dixon, James, Campbell, Ashley, Meredith, Patty, Knap, Mathew, Parkin, Thomas, Noel	No

Title	Journal	Link	Publication date	References	Top Paper
Clinical and biological markers of premature aging after autologous SCT in childhood cancer	Bone Marrow Transplantation	http://www.nature.com/doifinder/10.1038/bmt.2016.334	2017	A, Vatanen, M, Hou, T, Huang, O, Söder, T, Jahnukainen, M, Kurimo, T H, Ojala, T, Sarkola, M, Turanlahti, U M, Saarinen-Pihkala, K, Jahnukainen	No
Neonatal Arterial Morphology Is Related to Body Size in Abnormal Human Fetal GrowthCLINICAL PERSPECTIVE	Circulation: Cardiovascular Imaging	http://www.ncbi.nlm.nih.gov/pubmed/27601367	2016	Rasmus F.W., Olander, Johnny K.M., Sundholm, Tiina H, Ojala, Sture, Andersson, Taisto, Sarkola	No
Epidermal Thickness and Biomechanical Properties of Plantar Tissues in Diabetic Foot	Ultrasound in Medicine and Biology	https://doi.org/10.1016/j.ultrasmedbio.2011.04.004	2011	Clare Y L, Chao, Yong Ping, Zheng, Gladys L Y, Cheing	No
Assessment of early radial injury after transradial coronary intervention by high-resolution ultrasound biomicroscopy: Innovative technology application	Chinese Medical Journal	https://doi.org/10.3760/cma.j.issn.0366-6999.2012.19.005	2012	Hua, Shen, Yu jie, Zhou, Yu yang, Liu, Jie, Du, Xiao li, Liu, Zhen xian, Yan, Zhi jian, Wang, Fei, Gao, Shi wei, Yang, De an, Jia, Hong ya, Han, Miao, Yu, Qian, Ma, Xiao han, Xu	No
The potential influence of diabetic history on peripheral blood flow in superficial skin	Microvascular Research	https://doi.org/10.1016/j.mvr.2013.06.006	2013	Gladys Lai Ying, Cheing, Jiahui, Sun, Rachel Lai Chu, Kwan, Yongping, Zheng	No
Radiotherapy-related arterial intima thickening and plaque formation in childhood cancer survivors detected with very-high resolution ultrasound during young adulthood	Pediatric Blood & Cancer	http://doi.wiley.com/10.1002/pbc.25616	2015	Anu, Vatanen, Taisto, Sarkola, Tiina H., Ojala, Maila, Turanlahti, Timo, Jahnukainen, Ulla M., Saarinen-Pihkala, Kirsi, Jahnukainen	No
Radial artery intima-media thickness predicts major cardiovascular events in patients with suspected coronary artery disease	European Heart Journal Cardiovascular Imaging	https://doi.org/10.1093/ehjci/jet285	2014	Charlotte, Eklund, Elmir, Omerovic, Inger, Haraldsson, Peter, Friberg, Li Ming, Gan	No
Increased Rate of Arterial Stiffening with Obesity in Adolescents: A Five-Year Follow-Up Study	PLoS ONE	http://dx.plos.org/10.1371/journal.pone.0057454	2013	Frida, Dangardt, Yun, Chen, Krister, Berggren, Walter, Osika, Peter, Friberg	No
Thicker carotid intima layer, thinner media layer and higher intima/media ratio in women with recurrent depressive disorders: A pilot study using non-invasive high frequency ultrasound	The World Journal of Biological Psychiatry	http://informahealthcare.com/doi/abs/10.3109/15622970902789122	2010	Hannes, Bohman, Ulf, Jonsson, Anne-Liis Von, Knorring, Lars Von, Knorring, Gunilla, Olsson, Aivar, Päären, Marita, Larsson, Tord, Naessen	No
Obese children show increased intimal wall thickness and decreased pulse wave velocity	Clinical Physiology and Functional Imaging	https://doi.org/10.1111/j.1475-097X.2008.00806.x	2008	Frida, Dangardt, Walter, Osika, Reinhard, Volkmann, Li Ming, Gan, Peter, Friberg	No

Title	Journal	Link	Publication date	References	Top Paper
The Rotterdam Radial Access Research	Circulation: Cardiovascular Interventions	http://circinterventions.ahajournals.org/lookup/doi/10.1161/CIRCINTERVENTIONS.1...	2016	Francesco, Costa, Maarten a.H., van Leeuwen, Joost, Daemen, Roberto, Diletti, Floris, Kauer, Robert-Jan, van Geuns, Jurgen, Ligthart, Karen, Witberg, Felix, Zijlstra, Marco, Valgimigli, Nicolas M., Van Mieghem	No
Assessment of vascular remodeling after the Fontan procedure using a novel very high resolution ultrasound method: arterial wall thinning and venous thickening in late follow-up	Heart and Vessels	http://link.springer.com/10.1007/s00380-011-0217-2	2013	Taisto, Sarkola, Edgar, Jaeggi, Cameron, Slorach, Wei, Hui, Timothy, Bradley, Andrew N., Redington	No
Increased intima thickness of the radial artery in individuals with prehypertension and hypertension	Atherosclerosis	https://doi.org/10.1016/j.atherosclerosis.2009.09.017	2010	Anna, Myredal, Li Ming, Gan, Walter, Osika, Peter, Friberg, Mats, Johansson	No
Increasing peripheral artery intima thickness from childhood to seniority	Arteriosclerosis, Thrombosis, and Vascular Biology	https://doi.org/10.1161/01.ATV.0000256468.95403.6f	2007	Walter, Osika, Frida, Dangardt, Julia, Grönros, Ulf, Lundstam, Anna, Myredal, Mats, Johansson, Reinhard, Volkmann, Tomas, Gustavsson, Li Ming, Gan, Peter, Friberg	No
Assessment of vascular phenotype using a novel very-high-resolution ultrasound technique in adolescents after aortic coarctation repair and/or stent implantation: relationship to central haemodynamics and left ventricular mass	Heart	http://heart.bmj.com/cgi/doi/10.1136/hrt.2011.226241	2011	Taisto, Sarkola, Andrew N, Redington, Cameron, Slorach, Wei, Hui, Timothy, Bradley, Edgar, Jaeggi	No
Feasibility of very-high resolution ultrasound to assess elastic and muscular arterial wall morphology in adolescents attending an outpatient clinic for obesity and lipid abnormalities	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2011.08.036	2011	Taisto, Sarkola, Arvin A, Abadilla, Nita, Chahal, Edgar, Jaeggi, Brian W., McCrindle	No
Transcutaneous very-high-resolution ultrasound to quantify arterial wall layers of muscular and elastic arteries: Validation of a method	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2010.06.043	2010	Taisto, Sarkola, Andrew, Redington, Fred, Keeley, Timothy, Bradley, Edgar, Jaeggi	No
High-Frequency Ultrasound for Evaluation of Intimal Thickness	Journal of the American Society of Echocardiography	http://dx.doi.org/10.1016/j.echo.2009.06.021	2009	Emile R Mohler, Iii, Alexandra A, Sibley, Susan M, Schultz, Lifeng, Zhang, Chandra M, Sehgal	No
High-resolution ultrasound showing increased intima and media thickness of the radial artery in patients with end-stage renal disease	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2010.01.031	2010	Mats, Johansson, Anna, Myredal, Peter, Friberg, Li Ming, Gan	No

Title	Journal	Link	Publication date	References	Top Paper
Arteriovenous Fistulas for Hemodialysis: Application of High-Frequency US to Assess Vein Wall Morphology for Cannulation Readiness	Radiology	http://pubs.rsna.org/doi/abs/10.1148/radiol.11102439	2011	Arash, Jaberi, Derek, Muradali, Rosa M, Marticorena, Niki, Dacouris, Adrien, Boutin, Anna M, Mulligan, Peter D, Ballyk, Vikramaditya, Prabhudesai, Vern M, Campbell, Sandra M, Donnelly	No
High-resolution radial artery intima-media thickness and cardiovascular risk factors in patients with suspected coronary artery disease – Comparison with common carotid artery intima-media thickness	Atherosclerosis	http://dx.doi.org/10.1016/j.atherosclerosis.2011.12.035	2012	Charlotte, Eklund, Peter, Friberg, Li-ming, Gan	No
High-frequency micro-ultrasound for vascular access in young children--a feasibility study by the High-frequency UltraSound in Kids studY (HUSKY) group.	Paediatric anaesthesia	http://www.ncbi.nlm.nih.gov/pubmed/23445349	2013	Gregory J, Latham, Melissa L, Veneracion, Denise C, Joffe, Adrian T, Bosenberg, Sean H, Flack, Daniel K, Low	No