Curriculum Vitae

Personal Information

Title	**Prof.**
Name	**Hideki Ota**
Degree	**MD, Ph.D.**
Country	**Japan**
Affiliation	**Medical IT Center and Department of Diagnostic Radiology, Tohoku University Hospital**

Educational Background

2006 Ph.D. Diagnostic Radiology, Tohoku University, Graduate School of Medicine, Sendai, Miyagi, Japan
2000 M.D. Tohoku University, School of Medicine, Sendai, Miyagi, Japan
1994 Graduated from Kaisei Academy High School, Tokyo, Japan

Professional Career

Apr. 2023-present. Prof. Medical IT Center, Tohoku University Hospital, Sendai, Japan
Oct. 2018-Mar 2023 Associate Prof. Department of Advanced MRI Collaborative Research, Tohoku University Graduate School of Medicine, Sendai, Japan
Oct.2008-Sep. 2018. Assistant Prof. Department of Diagnostic Radiology, Tohoku Univ. Hosp. Sendai, Japan.
May 2008-Sep. 2008 Senior fellow, Department of Radiology, Michigan State University, East Lansing, MI.
Sep. 2007-Apr. 2008 Senior fellow, The Vascular Imaging Lab., Department of Radiology,
University of Washington, Seattle, WA.
Apr. 2006–Sep. 2007 Radiologist, Osaki Citizen Hospita, Miyagi, Japan
Apr. 2003–Mar. 2006 PhD candidate, Tohoku University, Graduate School of Medicine, Sendai, Japan
May 2000–Mar. 2003 Resident, Ishinomaki Redcross Hospital, Miyagi, Japan

Research Field

Cardiovascular Radiology
Interventional Radiology

Main Scientific Publications

1. **Ota H**, Morita Y, Vucevic D, Higuchi S, Takagi H, Kutsuna H, Yamashita Y, Kim P, Miyazaki M. Motion robust coronary MR angiography using zigzag centric ky–kz trajectory and high-resolution deep learning reconstruction. Magn Reson Mater Phy. Published online June 25, 2024. doi:10.1007/s10334-024-01172-9
2. Sun W, **Ota H**, Sato H, Yamamoto S, Tatebe S, Aoki T, Sugimura K, Tominaga J, Shimokawa H, Ueda T, Takase K. Systemic-pulmonary collateral supply associated with clinical severity of chronic thromboembolic pulmonary hypertension: A study using intra-aortic computed tomography angiography. Eur Radiol. 2022;32(11):7668-7679. doi:10.1007/s00330-022-08768-6.
3. Kamada H, **Ota H**, Nakamura M, Sun W, Aoki T, Sato H, Sugimura K, Takase K. Quantification of vortex flow in pulmonary arteries of patients with chronic thromboembolic pulmonary hypertension. European Journal of Radiology. Published online January 1, 2022:110142. doi:10.1016/j.ejrad.2021.110142
4. **Ota H**, Kamada H, Higuchi S, Takase K. Clinical Application of 4D Flow MR Imaging to Pulmonary Hypertension. Magnetic Resonance in Medical Sciences. 2022;21(2):309-318. doi:10.2463/mrms.rev.2021-0111
5. Mori R, Kassai Y, Masuda A, Morita Y, Kimura T, Nagasaka T, Nishina T, Tanaka S, Miyazaki M, Takase K, **Ota H.** Ultrashort echo time time-spatial labeling inversion pulse magnetic resonance angiography with denoising deep learning reconstruction for the assessment of abdominal visceral arteries. JMRI 2020. doi:https://doi.org/10.1002/jmri.27481
6. Yoshida N, **Ota H**, Higuchi S, Sekiguchi Y, Kakihana T, Sato H, Kimura T, Izumi S-I, Kohzuki M. Gliding performance is affected by cranial movement of abdominal organs. Scientific Reports. 2020;10(1):21430. doi:10.1038/s41598-020-78609-3
7. Higuchi S, **Ota H**, Tezuka Y, Seiji K, Takagi H, Lee J, Lee Y-W, Omata K, Ono Y, Morimoto R, Kudo M, Satoh F, Takase K. Aldosterone-induced cardiac damage in primary aldosteronism depends on its subtypes. Endocrine Connections. 2020;1. doi:10.1530/EC-20-0504
8. Kamada H, **Ota H**, Terui Y, Sugimura K, Fukui S, Shimokawa H, et al. Three cases of pulmonary tumor thrombotic microangiopathy (PTTM): Challenge in antemortem diagnosis using lung perfusion blood volume images by dual-energy computed tomography. European Journal of Radiology Open. 2020;7:100212.
9. Kamada H, **Ota H**, Nakamura M, Imai Y, Ishida S, Sun W, et al. Perioperative Hemodynamic Changes in the Thoracic Aorta in Patients With Aortic Valve Stenosis: A Prospective Serial 4D-Flow MRI Study. Seminars in Thoracic and Cardiovascular Surgery. Elsevier; 2020;32:25–34.

10. Kayano S, **Ota H**, Yamaguchi T, Ono K, Takase K. Association of the incidence of venous air embolism on coronary computed tomography angiography with the intravenous access route preparation process. Medicine. 2019;98:e17940.
11. Higuchi S, **Ota H**, et al. 3T MRI evaluation of regional catecholamine-producing tumor-induced myocardial injury. Endocrinology Connections. 2019;8:1-8
12. **Ota H,** Tamura H, et al. Quantitative characterization of carotid plaque components using magnetic resonance apparent diffusion coefficients and longitudinal relaxation rates at 3 Tesla: a validation study by comparison with histology. JMRI 2018.
13. Takagi H, **Ota H**, et al. Left Ventricular T1 Mapping during Chemotherapy–Radiation Therapy: Serial Assessment of participants with Esophageal Cancer. Radiology. 2018;172-76.
14. **Ota H,** Higuchi S, Sun W, Ueda T, Takase K, Tamura H. Four-Dimensional Flow Magnetic Resonance Imaging for Cardiovascular Imaging: from Basic Concept to Clinical Application. Cardiovascular Imaging Asia. 2018;2(2):85-96. doi:10.22468/cvia.2018.00045.
15. Kozumi M, **Ota H**, Yamamoto T, Umezawa R, Matsushita H, Ishikawa Y, Takahashi N, Matsuura T, Takase K, Jingu K. Oesophageal squamous cell carcinoma: histogram-derived ADC parameters are not predictive of tumour response to chemoradiotherapy. European Radiology. May 2018. doi:10.1007/s00330-018-5439-6.
16. Zhai Z, **Ota H**, et al. Treatment Effect of Balloon Pulmonary Angioplasty in Chronic Thromboembolic Pulmonary Hypertension Quantified by Automatic Comparative Imaging in Computed Tomography Pulmonary Angiography. Invest Radiol. 2018;53(5):286-292.
17. Takahashi Y, **Ota H**, et al. Image quality and radiation dose of low-tube-voltage CT with reduced contrast media for right adrenal vein imaging. European Journal of Radiology. 2018;98:150-157.
18. **Ota H**, et al. Coil embolization of left ventricular outflow tract pseudoaneurysms: techniques and 5-year results. Interact CardioVasc Thorac Surg. 2017:ivw394. doi:10.1093/icvts/ivw394.
19. Omura K, **Ota H**, Takahashi Y, Matsuura T, Seiji K, Arai Y, Morimoto R, Satoh F, Takase K. Anatomical Variations of the Right Adrenal Vein. Hypertension. January 2017:HYPERTENSIONAHA.116.08375.
20. **Ota H**, Morita Y, Saiki Y, Takase K. Coil embolization of left ventricular outflow tract pseudoaneurysms: techniques and 5-year results. Interact CardioVasc Thorac Surg. 2017;24(4):631-633. doi:10.1093/icvts/ivw394.
21. Hasegawa T, **Ota H**, Matsuura T, Hitachi S, Tominaga J, Seiji K, Tamura R, Mugikura S, Takase K. Endovascular treatment of hepatic artery pseudoaneurysm after pancreaticoduodenectomy: Risk factors associated with mortality and complications. J Vasc Interv Radiol. 2017;28:50-59.e5. doi: 10.1016/j.jvir.2016.04.004. Epub 2016 Jun 16.
22. **Ota H**, Seiji K, Kawabata M, Satani N, Omata K, Ono Y, Iwakura Y, Morimoto R, Matsuura T, Kudo M, Tominaga J, Satoh F, Ito S, Takase Ket al. Dynamic multidetector CT and non-contrast-enhanced MR for right adrenal vein imaging: comparison with catheter venography in adrenal venous sampling. Eur Radiol. 2016;26:622–630.
23. Takagi H, **Ota H**, Sugimura K, Otani K, Tominaga J, Aoki T, Tatebe S, Miura M, Yamamoto S, Sato H, Yaoita N, Suzuki H, Shimokawa H, Takase K. Dual-energy CT to estimate clinical severity of chronic thromboembolic pulmonary hypertension: Comparison with invasive right heart catheterization. European Journal of Radiology. 2016;85(9):1574-1580.
24. Sato H, **Ota H**, Sugimura K, Aoki T, Tatebe S, Miura M, Yamamoto S, Yaoita N, Suzuki H, Satoh K, Takase K, Shimokawa H. Balloon Pulmonary Angioplasty Improves Biventricular Functions and Pulmonary Flow in Patients with Chronic Thromboembolic Pulmonary Hypertension. Circ J. 2016 May 25;80(6):1470-7. doi: 10.1253/circj.CJ-15-1187. Epub 2016 Apr 20.
25. Takagi H, **Ota H,** Natsuaki Y, Komori Y, Ito K, Saiki Y, Takase K. Identifying the Adamkiewicz artery using 3-T time-resolved magnetic resonance angiography: its role in addition to multidetector computed tomography angiography. Jpn J Radiol. 2015;33(12):749-56. doi: 10.1007/s11604-015-0490-6. Epub 2015 Oct 26.
26. Satani N, **Ota H**, Seiji K, Morimoto R, Kudo M, Iwakura Y, Ono Y, Nezu M, Omata K, Ito S, Satoh F, Takase K. Segmental adrenal venous sampling for localization of intra-adrenal aldosterone secretion. Radiology. 2015 Jul 6:142159.
27. **Ota H**, Reeves MJ, Zhu DC, Majid A, Collar A, Yuan C, DeMarco JK. Sex Differences of High-Risk Carotid Atherosclerotic Plaque with Less Than 50% Stenosis in Asymptomatic Patients: An In Vivo 3T MRI Study. American Journal of Neuroradiology. 2013;34(5):1049-1055. doi:10.3174/ajnr.A3399.
28. **Ota H,** Reeves MJ, Zhu DC, Majid A, Collar A, Yuan C, Demarco JK* Sex differences in patients with asymptomatic carotid atherosclerotic plaque: in vivo 3.0-T magnetic resonance study. Stroke. 2010;41:1630-5.
29. **Ota H**, Yuan C. et al. Carotid Intraplaque Hemorrhage Imaging at 3.0-Tesla MRI: A Comparison of the Diagnostic Performance of Three T1-weighted Sequences. ***Radiology***. 2009;254:551-563.
30. **Ota H**, Yu W, Underhill HR, Oikawa M, Dong L, Zhao X, Polissar NL, Neradilek B, Gao T, Zhang Z, Yan Z, Guo M, Zhang Z, Hatsukami TS, Yuan C* Hemorrhage and Large Lipid-Rich Necrotic Cores Are Independently Associated With Thin or Ruptured Fibrous Caps. An In vivo 3T MRI Study. Arterioscler. Thromb. Vasc. Biol. 2009;29;1696-17011.
31. **Ota H,** Takase K, Rikimaru H, Tsuboi M, Yamada T, Sato A, Higano S, Ishibashi T, Takahashi S. Quantitative Vascular Measurements in Arterial Occlusive Disease. ***RadioGraphics*** 2005;25:1141-1158.
32. **Ota H,** Takase K, et al. MDCT compared with digital subtraction angiography for assessment of lower extremity arterial occlusive disease: importance of reviewing cross-sectional images. ***AJR Am J Roentgenol.*** 2004 Jan;182(1):201-9.