Wei-Chung Tsai, M.D 蔡維中

Division of Cardiology, Department of Internal Medicine; Kaohsiung Medical University Hospital

100 Shih-Chuan 1st Road, Kaohsiung 80708, Taiwan, Republic of China

Birth date and Place

November 29, 1978 born in Kaohsiung City, Taiwan, R.O.C.

Marital Status

Unmarried

Education

September 1996 – June 2003

Department of Medicine, Kaohsiung Medical College, M.D. degree

September 2008 – June 2010

Graduate institute of occupational safety and health, Kaohsiung Medical University, Master of Science degree (MSc)

Professional Appointment

February 2017 – Present

Assistant professor, Department of Internal Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan, R.O.C.

August 2008 – Present

Attending Physician, Division of Cardiology, Department of internal medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.

Research and Clinical Training

June 2013 – July 2015

Faculty, The Krannert Institute of Cardiology and Division of Cardiology, Department of Medicine, Indiana University School of Medicine, Indianapolis, IN, USA.

August 2006 – July 2008

Fellow, Cardiology Section, Department of internal medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.

August 2003 - July 2006

Resident, General Internal Medicine, Department of internal medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.

June 2002 - May 2003

Internship, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.

Qualification

Member of Taiwan Society of Internal Medicine, qualified as specialist in internal medicine since 2006

Member of Taiwan Society of Cardiology, qualified as specialist in cardiology since 2008

Member of Taiwan Society of Echocardiography, qualified as specialist in cardiology since 2009

Member of Critical Care Medicine in Taiwan, qualified as specialist in cardiology since 2009

Member of Taiwan Society of Cardiology, qualified as interventional cardiologist since 2009

Board of cardiac electrophysiology and interventions in Taiwan Society of Cardiology, qualified as specialist in cardiology since 2011

Field of interest

Arrhythmia, electrophysiology study and radiofrequency ablation

Cardiac catheterization, percutaneous intervention in coronary and peripheral vascular disease

Cardiac and Vascular Ultrasound

Critical care medicine

Hypertension / Dyslipidemia / Congestive heart failure

Acute coronary syndrome, stable angina and coronary artery disease

Papers

1. **Tsai WC**, Chu CS, Wu DK, Lai WT, Lee KT. Successful catheter ablation of typical atrial flutter in a patient with a long vertical and diverticulum-like cavotricuspid isthmus. *Pacing Clin Electrophysiol*. 2008 Dec;31(12):1653-5.
2. **Wei-Chung Tsai**, Hsiao-Cheng Hsieh, Ho-Ming Su, Po-Liang Lu, Tsung-Hsien Lin, Sheng-Hsiung Sheu, Wen-Ter Lai. *Mycobacterium abscessus* endocarditis – A Case Report and literature review. *Kaohsiung J Med Sci* 2008;24:481–6.
3. **Tsai WC**, Lee KT, Cheng KH, Huang CH, Lin HC, Sheu SH, Lai WT. Suppression of atrial fibrillation following successful ablation of atrioventricular nodal reentrant tachycardia: a case report. *Kaohsiung J Med Sci*. 2009 Apr;25(4):207-11
4. Lin SJ, Lee KT, Lin KC, Cheng KH, **Tsai WC**, Sheu SH, Wu MT, Lee CH, Lai WT. Prevalence of prehypertension and associated risk factors in a rural Taiwanese adult population. *Int J Cardiol*. 2009 Feb 13. [Epub ahead of print]
5. Su HM, **Tsai WC**, Lin TH, Hsu PC, Lee WH, Lin MY, Chen SC, Lee CS, Voon WC, Lai WT, Sheu SH. P wave dispersion and maximum P wave duration are independently associated with rapid renal function decline. PLoS One. 2012;7(8):e42815.
6. Lee KT, Hsieh CC, **Tsai WC**, Tang PW, Liu IH, Chai CY, Sheu SH, Lai WT. Characteristics of atrial substrates for atrial tachyarrhythmias induced in aged and hypercholesterolemic rabbits. Pacing Clin Electrophysiol. 2012 May;35(5):544-52.
7. **Tsai WC**, Wu MT, Wang GJ, Lee KT, Lee CH, Lu YH, Yen HW, Chu CS, Chen YT, Lin TH, Su HM, Hsu PC, Cheng KH, Duh TH, Ko YC, Sheu SH, Lai WT. Chewing areca nut increases the risk of coronary artery disease in Taiwanese men: a case-control study. BMC Public Health. 2012 Mar 7;12:162.
8. Hsu PC, **Tsai WC**, Lin TH, Su HM, Voon WC, Lai WT, Sheu SH. Association of arterial stiffness and electrocardiography-determined left ventricular hypertrophy with left ventricular diastolic dysfunction. PLoS One. 2012;7(11):e49100.

9. **Tsai WC**, Lee KT, Kuo HF, Tang WH, Jhuo SJ, Chu CS, Lin TH, Hsu PC, Lin MY, Lin FH, Su HM, Voon WC, Lai WT, Sheu SH. Association of increased arterial stiffness and p wave dispersion with left ventricular diastolic dysfunction. Int J Med Sci. 2013 Aug 26;10(11):1437-44.
10. **Tsai WC**, Chen CY, Kuo HF, Wu MT, Tang WH, Chu CS, Lin TH, Su HM, Hsu PC, Jhuo SJ, Lin MY, Lee KT, Sheu SH, Lai WT. Areca nut chewing and risk of atrial fibrillation in Taiwanese men: a nationwide ecological study. Int J Med Sci. 2013 Apr 25;10(7):804-11.
11. Lee KT, Tang PW, **Tsai WC**, Liu IH, Yen HW, Voon WC, Wu BN, Sheu SH, Lai WT. Differential effects of central and peripheral fat tissues on the delayed rectifier K(+) outward currents in cardiac myocytes. Cardiology. 2013;125(2):118-24.
12. **Tsai WC**, Lee KT, Wu MT, Chu CS, Lin TH, Hsu PC, Su HM, Voon WC, Lai WT, Sheu SH. Significant correlation of P-wave parameters with left atrial volume index and left ventricular diastolic function. Am J Med Sci. 2013 Jul;346(1):45-51.
13. **Tsai WC**, Chen PS. Cross talk between renal and cardiac autonomic nerves: is this how renal denervation works? J Cardiovasc Electrophysiol. 2014 Nov;25(11):1257-8.
14. Chan YH, **Tsai WC**, Song Z, Ko CY, Qu Z, Weiss JN, Lin SF, Chen PS, Jones LR, Chen Z. Acute reversal of phospholamban inhibition facilitates the rhythmic whole-cell propagating calcium waves in isolated ventricular myocytes. J Mol Cell Cardiol. 2015 Mar;80:126-35.
15. Jiang Z, Zhao Y, Doytchinova A, Kamp NJ, **Tsai WC**, Yuan Y, Adams D, Wagner D, Shen C, Chen LS, Everett TH 4th, Lin SF, Chen PS. Using Skin Sympathetic Nerve Activity to Estimate Stellate Ganglion Nerve Activity in Dogs. Heart Rhythm. 2015 Feb 11. pii: S1547-5271(15)00158-7.
16. Chan YH, **Tsai WC**, Shen C, Han S, Chen LS, Lin SF, Chen PS. Subcutaneous nerve activity is more accurate than heart rate variability in estimating cardiac sympathetic tone in ambulatory dogs with myocardial infarction. Heart Rhythm. 2015 Jul;12(7):1619-27.
17. Chan YH, **Tsai WC**, Ko JS, Yin D, Chang PC, Rubart M, Weiss JN, Everett TH 4th, Lin SF, Chen PS. Small-Conductance Calcium-Activated Potassium Current Is Activated During Hypokalemia and Masks Short-Term Cardiac Memory Induced by Ventricular Pacing. Circulation. 2015 Oct 13;132(15):1377-86.
18. Chinda K, **Tsai WC**, Chan YH, Lin AY, Patel J, Zhao Y, Tan AY, Shen MJ, Lin H, Shen C, Chattipakorn N, Rubart-von der Lohe M, Chen LS, Fishbein MC, Lin SF, Chen Z, Chen PS. Intermittent left cervical vagal nerve stimulation damages the stellate ganglia and reduces the ventricular rate during sustained atrial fibrillation in ambulatory dogs. Heart Rhythm. 2016 Mar;13(3):771-80.
19. **Tsai WC**, Chan YH, Hsueh CH, Everett TH 4th, Chang PC, Choi EK, Lin SF, Shen C, Kudela MA, Rubart-von der Lohe M, Chen Z, Jadiya P, Tomar D, Luvison E, Anzalone N, Patel VV, Chen PS. Small conductance calcium-activated potassium current and the mechanism of atrial arrhythmia in mice with dysfunctional melanocyte-like cells. Heart

Rhythm. 2016 Jul;13(7):1527-35.

20. **Tsai WC**, Haung YB, Kuo HF, Tang WH, Hsu PC, Su HM, Lin TH, Chu CS, Jhuo SJ, Lee KT, Sheu SH, Chen CY, Wu MT, Lai WT. Hormone replacement therapy and risk of atrial fibrillation in Taiwanese menopause women: A nationwide cohort study. Sci Rep. 2016 Apr 7;6:24132.
21. Jhuo SJ, **Tsai WC**, Lin TH, Voon WC, Lai WT, Sheu SH. Statin Dose and the Risk of Intracerebral Hemorrhage: A Population-Based Longitudinal Study in Taiwan. Acta Cardiol Sin. 2016 Jan;32(1):23-30.
22. Zhao Y, Jiang Z, **Tsai WC**, Yuan Y, Chinda K, Choi EK, Fishbein MC, Lin SF, Chen PS, Everett TH 4th. Ganglionated plexi and ligament of Marshall ablation reduces atrial vulnerability and causes stellate ganglion remodeling in ambulatory dogs. Heart Rhythm. 2016 Oct;13(10):2083-90.
23. Hu YF, Wang HH, Yeh HI, Lee KT, Lin YJ, Chang SL, Lo LW, Tuan TC, Li CH, Chao TF, Chung FP, Liao JN, Tang PW, **Tsai WC**, Chiou CW, Chen SA. Association of Single Nucleotide Polymorphisms with Atrial Fibrillation and the Outcome after Catheter Ablation. Acta Cardiol Sin. 2016 Sep;32(5):523-531.
24. Zhao Y, Jiang Z, **Tsai WC**, Yuan Y, Chinda K, Choi EK, Fishbein MC, Lin SF, Chen PS, Everett TH 4th. Ganglionated plexi and ligament of Marshall ablation reduces atrial vulnerability and causes stellate ganglion remodeling in ambulatory dogs. Heart Rhythm. 2016 Oct;13(10):2083-90. doi: 10.1016/j.hrthm.2016.07.014.
25. **Tsai WC**, Chan YH, Chinda K, Chen Z, Patel J, Shen C, Zhao Y, Jiang Z, Yuan Y, Ye M, Chen LS, Riley AA, Persohn SA, Territo PR, Everett TH, Lin SF, Vinters HV, Fishbein MC, Chen PS. Effects of renal sympathetic denervation on the stellate ganglion and the brain stem in dogs. Heart Rhythm. 2017 Feb;14(2):255-262.
26. Yin D, Hsieh YC, **Tsai WC**, Zhi-Yang Wu A, Jiang Z, Chan YH, Xu D, Yang N, Shen C, Chen Z, Lin SF, Chen PS, Everett TH 4th. Role of Apamin-Sensitive Calcium-Activated Small-Conductance Potassium Currents on the Mechanisms of Ventricular Fibrillation in Pacing-Induced Failing Rabbit Hearts. Circ Arrhythm Electrophysiol. 2017 Feb;10(2):e004434. doi: 10.1161/CIRCEP.116.004434.
27. Lee HC, Chen CC, **Tsai WC**, Lin HT, Shiao YL, Sheu SH, Wu BN, Chen CH, Lai WT. Very-Low-Density Lipoprotein of Metabolic Syndrome Modulates Gap Junctions and Slows Cardiac Conduction. Sci Rep. 2017 Sep 21;7(1):12050. doi: 10.1038/s41598-017-11416-5.
28. Yuan Y, Jiang Z, Zhao Y, **Tsai WC**, Patel J, Chen LS, Shen C, Lin SF, Chen HV, Everett TH 4th, Fishbein MC, Chen Z, Chen PS. Long-term intermittent high-amplitude subcutaneous nerve stimulation reduces sympathetic tone in ambulatory dogs. Heart Rhythm. 2017 Nov 27. pii: S1547-5271(17)31242-0. doi: 10.1016/j.hrthm.2017.10.028.
29. Hsu PC, Lee WH, Lee HC, **Tsai WC**, Chu CY, Chen YC, Lee CS, Lin TH2, Voon WC, Sheu SH, Su HM. Association between modified CHA2DS2-VASc Score with Ankle-Brachial

index < 0.9. Sci Rep. 2018 Jan 19;8(1):1175. doi: 10.1038/s41598-018-19243-y.

30. Yin D, Chen M, Yang N, Wu AZ, Xu D, **Tsai WC**, Yuan Y, Tian Z, Chan YH, Shen C, Chen Z, Lin SF, Weiss JN, Chen PS, Everett TH 4th. Role of apamin sensitive small conductance calcium-activated potassium currents in long term cardiac memory in rabbits. Heart Rhythm. 2018 Jan 8. pii: S1547-5271(18)30016-X. doi: 10.1016/j.hrthm.2018.01.016.
31. Hsu PC, Lee WH, Lee HC, **Tsai WC**, Chu CY, Chen YC, Lee CS, Lin TH, Voon WC, Sheu SH, Su HM. Association between modified CHA2DS2-VASc Score with Ankle-Brachial index < 0.9. Sci Rep. 2018 Jan 19;8(1):1175.