## 中區心臟血管學術會

日 期:113年6月22日 PM 14:00~16:15

地 點:裕元花園酒店 4 樓東側包廂(台中市西屯區台灣大道四段 610 號)

主 持 人: 陳清埤部長、廖英傑主任(彰化基督教醫院 心臟內科)

Time	Program	Speaker	Moderator
14:00~14:05	Welcome Address		張坤正會長 (中國醫大附設醫院)
14:05~14:10	Opening Address		陳清埤部長 (彰化基督教醫院)
Special Lecture			
14:10~15:10	Af rhythm management, past,present and future.	廖 英 傑 主 任 (彰化基督教醫院)	陳清埤部長 (彰化基督教醫院)
Case Report:(每病例報告 10 分鐘,討論 5 分鐘)			
15:10~15:25	Left Atrial Venting as a Game-Changer in STEMI-Induced Cardiogenic Shock	洪政宇醫師 (台中榮民總醫院)	廖 英 傑 主 任 (彰化基督教醫院)
15:25~15:40	The management of antiphospholipid syndrome related ACS and PE	李穎超醫師 (中山醫大附設醫院)	
15:40~15:55	Cheating Death: A Brush with the Unknown	黃信鎰醫師 (中國醫大附設醫院)	
15:55~16:10	Platypnea-Orthodeoxia Syndrome Caused by an Intracardiac Shunt	曾宇平醫師 (彰化基督教醫院)	
16:10~16:15	Closing Remarks		廖 英傑 主任 (彰化基督教醫院)

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學 分:內科學分、心臟專科學分、重症醫學會學分、急救加護學分申請中。

### 歡迎醫藥界同仁踴躍參加!

※ 下次預定主辦醫院:衛福部豐原醫院 日期:113.9.21 ※

# AF Rhythm Management, Past, Present, and Future

#### 彰化基督教醫院 心臟血管內科 廖英傑醫師

The considerable mortality and morbidity associated with atrial fibrillation (AF) pose a substantial burden on patients and health care services. Although rhythm control historically took no benefit, it evolved over time in favor of rate control. Based on available evidence from early RCTs, the primary goals for rhythm control have been to reduce AF-related symptoms and to improve QoL in patients with AF. Furthermore, current practice is moving towards offering rhythm control, not only for persistent symptoms, but also to reduce the risk of adverse cardiovascular outcomes in patients with new-onset and recently diagnosed AF. Ablation was previous a bail-out choice of rhythm management. Today first-line ablation may modify the disease progressive nature in addition to decrease AF recurrence while keeping very few complications.

Early therapy for AF is not only a possibility but is becoming necessary as screen and early detection of AF become increasingly common. The continued evolution of AF treatment will result in AADs with a better safety profile than previous AADs, and improved ablation therapy may not only reduce but also virtually eliminate AF recurrences, especially when delivered early in the course of the disease. Evidence supports early rhythm control in patients with AF that has not become long-standing, but current clinical practice and guidelines do not yet fully reflect this change. Early rhythm control may effectively reduce irreversible atrial remodeling and prevent AF-related deaths, heart failure, and strokes in high-risk patients. It also halts progression and potentially save patients from years of symptomatic AF.

# Left Atrial Venting as a Game-Changer in STEMI-Induced Cardiogenic Shock

#### 台中榮民總醫院 心臟內科 洪政宇

STEMI-induced cardiogenic shock (CS) remains a leading cause of mortality worldwide, despite advances in reperfusion strategies. Left atrial venting (LAV) has emerged as a potential game-changer in managing this critical condition. By alleviating left atrial hypertension, LAV facilitates left ventricular unloading, thereby reducing myocardial oxygen demand and enhancing coronary perfusion. This abstract reviews the physiological rationale behind LAV, its procedural techniques, and the evolving evidence supporting its efficacy in improving hemodynamic stability and outcomes in STEMI-induced CS. Additionally, it discusses the challenges and future directions in the widespread adoption of LAV, including patient selection, timing of intervention, and the need for further randomized controlled trials. As our understanding of the pathophysiology of CS evolves and technology advances, LAV holds promise as a pivotal adjunctive therapy in the management of this high-risk condition.

### The management of antiphospholipid syndrome related ACS and PE

#### 中山醫學大學附設醫院 心臟内科 李穎超

The 41 years old female with history of pulmonary embolism, was admitted due to worsen chest tightness for 4 days. She felt chest tightness and dull chest pain for 4 days, it was dull pain like stone pressing on the chest and would worsen while exertion. The chest tightness would onset even while resting, associated with shortness of breath. There's no orthopnea, lower limbs edema or oliguria. Though, she had dyspnea half year ago with pulmonary embolism, after taking medication, the dyspnea had improved, but dyspnea on exertion got worsen in the last 4 days. As above, she visited a local hospital, where lab data showed high cardiac enzyme (hsTroponin I), then she was referred to our hospital.

CAG revealed critical stenosis in the Right Coronary Artery (RCA), confirming the NSTEMI diagnosis. The patient underwent successful balloon angioplasty, catheter thrombectomy, and Bare-Metal Stent (BMS) deployment. Blood test showed antiphospholipid syndrome antibodies positive...

## **Cheating Death: A Brush with the Unknown**

#### 中國醫藥大學附設醫院 心臟內科 黃信鎰醫師

#### **Abstract**

A 45 year-old male suffered from chest tightness for one week. It was accompanied by orthopnea. Grade II/VI systolic murmur at the right upper sternal border was found. There was severe aortic regurgitation (stage D) disclosed by echocardiography report. The chest CT with contrast revealed cardiomegaly with pleural effusion. There are challenges in diagnosis and managements for the younger patients.

## Platypnea-Orthodeoxia Syndrome Caused by an Intracardiac Shunt

#### 彰化基督教醫院 心臟內科 曾宇平

#### Abstract

I would like to share a case of a 77-year-old man presented with dyspnea and oxygen desaturation when he sat up. Further investigation confirmed that there was intracardiac shunt. We perforemd percutaneous intervention for shunt closure, and an unusual condition was noted during intervention.



## Curriculum Vitae

Name: 廖英傑 Liao Ying-Chieh

Education: Taipei Medical University 臺北醫學大學醫學系 1998/9 ~ 2005/7

#### Current Position:

Director / attending physician: Division of Cardiology, Department of Medicine, Changhua Christian Hospital

彰化基督教醫院 心臟血管中心 主治醫師 / 主任國立中興大學兼任講師

#### Training:

Internship: Taipei Medical University Hospital and Wan-Fang Hospital 2004~2005 臺北醫學大學附設醫院 暨 台北市立萬芳醫院 實習醫師

Residency in Internal Medicine: Taichung Veterans General Hospital 2005~2008 臺中榮民總醫院 內科部 住院醫師

Fellowship in Cardiology: Cardiovascular Center, Taichung Veterans General Hospital 2008~2010 臺中榮民總醫院 心臟血管中心 總醫師

Fellowship in Electrophysiology: Cardiovascular Center, Taichung Veterans General Hospital 2008~2012 臺中榮民總醫院 心臟血管中心 電生理進修醫師

Fellowship in Electrophysiology: Division of Cardiology, Taipei Veterans General Hospital 2012~2013 臺北榮民總醫院 心臟科 電生理進修醫師

#### Work experience

Attending physician: Cardiovascular Center, Chiayi Branch, Taichung Veterans General Hospital 2012~2014 臺中榮民總醫院嘉義分院 心臟血管中心 主治醫師

Attending physician: Division of Cardiology, Department of Medicine, Buddhist Tzu-Chi General Hospital, Taichung branch 2014~2015 臺中慈濟醫院 心臟內科 主治醫師

Attending physician: Cardiovascular Center, Taichung Veterans General Hospital 2016~2019 臺中榮民總醫院 心臟血管中心 主治醫師

中華民國心臟學會副秘書長

中華民國心律醫學會副秘書長

#### Licensures:

Practice Physician in Taiwan 2005 中華民國醫師執照
Specialist of Internal Medicine 2008 內科專科醫師執照
Specialist of Cardiology 2010 心臟專科醫師執照
Specialist of Interventional Cardiology 2011 介入性心臟專科醫師執照
Specialist of Cardiac electrophysiology and interventions 2012 電生理專科醫師執照

#### Awards:

- 1. 2013 年南京會發表論文演說
- 2. 2013 中華民國心律醫學會「第三屆青年優秀論文獎」
- 3. 2015 年南京會發表論文演說 "Noninvasive Risk Stratification/Outcome of ARVC Patients"
- 4. 2015 年第一次心室心律不整國際會議(1<sup>™</sup> International Forum of Ventricular Arrhythmia)演說 "Noninvasive Risk Stratification Outcome of ARVC Patients"
- 5. 2015 年世界心律醫學會(2015 Heart Rhythm Society)代表台灣心律學會演說 "Noninvasive Risk Stratification of ARVC Patients by SAECG and Outcomes: a Taiwanese Longitudinal Follow-Up "
- 6. 2016 年亞太心律醫學會(2016 Asia Pacific Heart Rhythm Society)發表演說 "Puncture of An Atrial Septal Patch"
- 7. 2017 年亞太心律學會 (2017 Asia Pacific Heart Rhythm Society)病例競賽 "Inappropriate ICD Shock Induced by Cross-Chamber Blanking" 第一名

#### Publications:

- 1. Liao YC, Chen JY. ECG tracing during His pacing. Eur Heart J. 2021 Feb 1;42(5):545. doi: 10.1093/eurheartj/ehaa912. PMID: 33186446.
- Shih CY, Weng CJ, Liao YC. Leadless Pacemaker Implantation and Cavotricuspid Isthmus Ablation in Patients with Tachy-Brady Syndrome. Acta Cardiol Sin. 2021 Nov;37(6):661-663. doi: 10.6515/ACS.202111 37(6).20210530A. PMID: 34812242; PMCID: PMC8593484.
- 3. Tomaiko E, Liao YC, Reichert WB, Su WW. Focal cryoablation of atrioventricular node reentrant tachycardia: a review and comparison of data. Curr Opin Cardiol. 2021 Jan;36(1):17-21. doi: 10.1097/HCO.0000000000000820. PMID: 33093311.
- 4. Chung FP, Liao YC, Lin YJ, Chang SL, Lo LW, Hu YF, Tuan TC, Chao TF, Liao JN, Lin CY, Chang TY, Vicera JJB, Chin CG, Wu CI, Liu CM, Lee PT, Huang TC, Lugtu IC, Chen SA. Outcome of rescue ablation in patients with refractory ventricular electrical storm requiring mechanical circulation support. J Cardiovasc Electrophysiol. 2020 Jan;31(1):9-17. doi: 10.1111/jce.14309. Epub 2019 Dec 15. PMID: 31808239.
- 5. Hsieh YC, Hsieh WH, Li CH, Liao YC, Lin JC, Weng CJ, Lo MT, Tuan TC, Lin SF, Yeh HI, Huang JL, Haugan K, Larsen BD, Lin YJ, Lin WW, Wu TJ, Chen SA. Ventricular divergence correlates with epicardial wavebreaks and predicts ventricular arrhythmia in isolated rabbit hearts during therapeutic hypothermia. PLoS One. 2020 Feb 21;15(2):e0228818. doi: 10.1371/journal.pone.0228818. PMID: 32084145; PMCID: PMC7034916.
- 6. Chen CJ, Su MM, Liao YC, Chang FL, Wu CK, Lin LY, Chen YS, Lin YH, Hwang JJ, Yu SL, Kao HL, Chen WJ, Lu TP, Shih CY, Yeh SS, Yang DH, Lai LP, Juang JJ. Long-term outcomes and left ventricular diastolic function of sarcomere mutation-positive and mutation-negative patients with hypertrophic cardiomyopathy: a prospective cohort study. Eur Heart J Cardiovasc Imaging. 2020 Nov 22: jeaa317. doi: 10.1093/ehjci/jeaa317. Epub ahead of print. PMID: 33221870.
- 7. Chung FP, Wu CI, Lin YJ, Chang SL, Lo LW, Hu YF, Lin CY, Chang TY, Chao TF, Liao JN, Tuan TC, Kuo L, Liu CM, Chin CG, Liao YC, Chen SA. Precordial T-Wave Inversions in Patients with Arrhythmogenic Right Ventricular Cardiomyopathy Who Present with the Initial Features of Right Ventricular Outflow Tract Arrhythmia. Acta Cardiol Sin. 2020 Sep;36(5):464-474. doi: 10.6515/ACS.202009\_36(5).20200621A. PMID: 32952356; PMCID: PMC7490609.
- 8. Hsieh YC, Liao YC, Li CH, Lin JC, Weng CJ, Lin CC, Lo CP, Huang KC, Huang JL, Lin CH, Wang JS, Wu TJ, Sheu WH. Hypoglycaemic episodes increase the risk of ventricular arrhythmia and sudden cardiac arrest in patients with type 2 diabetes-A nationwide cohort study. Diabetes Metab Res Rev. 2020 Feb;36(2):e3226. doi: 10.1002/dmrr.3226. Epub 2019 Oct 31. PMID: 31655001.
- 9. Weng CJ, Li CH, Liao YC, Lin CC, Lin JC, Chang SL, Lo CP, Huang KC, Huang JL, Lin CH, Hsieh YC, Wu TJ. Data for rate versus rhythm control strategy on stroke and mortality in patients

- with atrial fibrillation. Data Brief. 2018 Sep 6;20:1279-1285. doi: 10.1016/j.dib.2018.08.199. eCollection 2018 Oct. PubMed PMID: 30238040; PubMed Central PMCID: PMC6143751.
- 10. Weng CJ, Li CH, Liao YC, Lin CC, Lin JC, Chang SL, Lo CP, Huang KC, Huang JL, Lin CH, Hsieh YC, Wu TJ. Rhythm control better prevents stroke and mortality than rate control strategies in patients with atrial fibrillation A nationwide cohort study. Int J Cardiol. 2018 Nov 1;270:154-159. doi: 10.1016/j.ijcard.2018.06.090. Epub 2018 Jun 26. PubMed PMID: 29980369.
- 11. Yamada S, Chung FP, Lin YJ, Chang SL, Lo LW, Hu YF, Chao TF, Liao JN, Lin CH, Lin CY, Chang YT, Te ALD, Liao YC, Chi PC, Chen SA. Electrocardiographic characteristics for predicting idiopathic right ventricular outflow tract premature ventricular complex-induced cardiomyopathy. J Interv Card Electrophysiol. 2018 Nov;53(2):175-185. doi: 10.1007/s10840-018-0384-5. Epub 2018 Jun 11. PubMed PMID: 29948583.
- 12. Chen YW, Wang CY, Lai YH, Liao YC, Wen YK, Chang ST, Huang JL, Wu TJ. Home-based cardiac rehabilitation improves quality of life, aerobic capacity, and readmission rates in patients with chronic heart failure. Medicine (Baltimore). 2018 Jan;97(4):e9629. doi: 10.1097/MD.00000000000009629. PubMed PMID: 29369178.
- 13. Chan CW, Yu CL, Lin JC, Hsieh YC, Lin CC, Hung CY, Li CH, Liao YC, Lo CP, Huang JL, Lin CH, Wu TJ. Glitazones and alpha-glucosidase inhibitors as the second-line oral anti-diabetic agents added to metformin reduce cardiovascular risk in Type 2 diabetes patients: a nationwide cohort observational study. Cardiovasc Diabetol. 2018 Jan 24;17(1):20. doi: 10.1186/s12933-018-0663-6. PubMed PMID: 29368615.
- 14. Hung Y, Lo LW, Lin YJ, Chang SL, Hu YF, Chung FP, Tuan TC, Chao TF, Liao JN, Walia R, Te ALD, Yamada S, Lin CH, Chang YT, Lin CY, Chan CS, Liao YC, Raharjo S, Allamsetty S, Chen SA. Characteristics and long-term catheter ablation outcome in long-standing persistent atrial fibrillation patients with non-pulmonary vein triggers. Int J Cardiol. 2017 Aug 15;241:205-211. doi: 10.1016/j.ijcard.2017.04.050. Epub 2017 Apr 21. PubMed PMID: 28456483.
- 15. Cheng CM, Su CS, Chou P, Liao YC, Wang CY, Zhang JR, Hsieh YC, Wu TJ, Chen YW, Weng CJ, Chang KH, Zhou W, Hung GU, Huang JL, Nakajima K. Prediction of Both Electrical and Mechanical Reverse Remodeling on Acute Electrocardiogram Changes After Cardiac Resynchronization Therapy. Circ J. 2017 Aug 25;81(9):1322-1328. doi: 10.1253/circj.CJ-16-1181. Epub 2017 Apr 22. PubMed PMID: 28442644.
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- 17. Liao YC, Liao JN, Lo LW, Lin YJ, Chang SL, Hu YF, Chao TF, Chung FP, Tuan TC, Te AL, Walia R, Yamada S, Lin CH, Lin CY, Chang YT, Allamsetty S, Yu WC, Huang JL, Wu TJ, Chen SA. Left Atrial Size and Left Ventricular End-Systolic Dimension Predict the Progression of Paroxysmal

- Atrial Fibrillation After Catheter Ablation. J Cardiovasc Electrophysiol. 2017 Jan;28(1):23-30. doi: 10.1111/jce.13115. Epub 2016 Nov 17. PubMed PMID: 27779351.
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- 23. Liao YC, Lin YJ, Chung FP, Chang SL, Lo LW, Hu YF, Chao TF, Chung E, Tuan TC, Huang JL, Liao JN, Chen YY, Chen SA. Risk stratification of arrhythmogenic right ventricular cardiomyopathy based on signal averaged electrocardiograms. Int J Cardiol. 2014 Jul 1;174(3):628-33. doi: 10.1016/j.ijcard.2014.04.169. Epub 2014 Apr 21. PubMed PMID: 24820746.
- 24. Liao YC, Hsieh YC, Hung CY, Huang JL, Lin CH, Wang KY, Wu TJ. Statin therapy reduces the risk of ventricular arrhythmias, sudden cardiac death, and mortality in heart failure patients: a nationwide population-based cohort study. Int J Cardiol. 2013 Oct 12;168(5):4805-7. doi: 10.1016/j.ijcard.2013.07.036. Epub 2013 Jul 23. PubMed PMID: 23890884.
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- 26. Liao YC, Liang KW, Lee WJ, Lee WL, Lee IT, Wang JS, Ting CT, Sheu WH. Leptin to adiponectin ratio as a useful predictor for cardiac syndrome X. Biomarkers. 2013 Feb;18(1):44-50. doi: 10.3109/1354750X.2012.730550. Epub 2012 Oct 15. PubMed PMID: 23066861.

- 27. Liao YC, Hsieh YC, Chang WC, Huang JL, Ting CT, Wu TJ. Fulminant myocarditis in an adult with 2009 pandemic influenza A (H1N1 influenza) infection. J Chin Med Assoc. 2011 Mar;74(3):130-3. doi: 10.1016/j.jcma.2011.01.028. Epub 2011 Feb 22. PubMed PMID: 21421208.
- 28. Hsieh YC, Huang JL, Chin CS, Lin TC, Liao YC, Ting CT, Wu TJ. Pre-clinical detection of amiodarone-induced acute fibrosing alveolitis by intra-thoracic impedance monitor of an implantable cardioverter-defibrillator. Europace. 2011 Jan;13(1):137-9. doi: 10.1093/europace/euq335. Epub 2010 Sep 17. PubMed PMID: 20851824.

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#### 車長

心臟急重症照護、心臟內科學、冠狀動脈心臟病及介入、心臟衰竭、三高控制、戒菸服務、心臟預防醫學、結構性心臟病與心臟超音波、一般內科

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● 中國醫藥大學附設醫院 內科部心臟血管系 主治醫師

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- 中華民國心臟內科專科醫師
- 中華民國內科專科醫師
- 中國醫藥大學內科優良住院醫師
- 中國醫藥大學附設醫院中西醫結合科住院醫師
- 中華民國中醫專科醫師

## 曾宇平醫師

## 現職

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