Why maze procedure should be performed during cardiac surgery?

Atrial fibrillation (AF) is the most common arrhythmia worldwide. Stroke is the main cause death in patients with AF. The maze procedure is the gold standard for surgical treatment of AF. Current guidelines for AF by the Society of Thoracic Surgeons are especially focused on the maze procedure during concomitant cardiac surgery as well as the primary procedure after failed catheter and medical therapy for AF. Current trends indicate that only 38% of patients having concomitant AF during cardiac surgery undergo maze procedure. Given this fact, we sought to show that maze procedure is a safe, effective surgical procedure in eliminating AF. Mortality and morbidity rates after maze are not different when comparing with cardiac surgery alone. Early and late survival improves after maze. Restoring normal sinus rhythm is much better when maze procedure is added. Rates for early and late stroke go down after maze, likely strongly related to the left atrial appendage removal during maze procedure. Surgical times are clearly shorter when using alternative energy sources as bipolar radiofrequency and/or cryothermia in order to perform the maze procedure. In conclusion, to sum up, there is no reason to avoid the maze procedure when indicated. Because of the high effective rate of sinus conversion as well as its low rate of complications, maze procedure should be performed when indicated during the course of cardiac procedures, even as a primary procedure for cases of stand-alone AF after failed catheter-based or antiarrhythmic therapies.

Biography

Ovidio A Garcia Villarreal is a Cardiac Surgeon dedicated to the private practice, retired from the Social Medicine. He is the Past President of the Mexican Society of Cardiac Surgery, and the Current President of the Mexican College of Cardiovascular and Thoracic Surgery. He has been working on the mitral, aortic and tricuspid reconstruction for more than 25 years. He has been a pioneer in the field of Cardiac Arrhythmia Surgery, especially in Atrial Fibrillation Surgery (Cox-maze procedure) as well as in Aortic Valve Sparing Operations in Mexico. He has implemented national surgical models for valvular heart reconstruction and maze procedure. He has been also dedicated to clinical research, with more than 50 international publications in PubMed and Editor-in-Chief of the journal Cirugia Cardioaca en Mexico, and reviewer of more than 15 international journals. He is an active member of the Mexican Society of Cardiac Surgery, Society of Thoracic Surgeons, European Association of Cardiothoracic Surgery, amongst others.

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