



الخطة البحثية لوحدرة القلب و الأوعية الدموية للأعوام الجامعية ٢٠٢٠-٢٠٢٥

Objectives:

- 1- Filling the gaps in evidence in management of cardiac diseases.
- 2- Solving the contemporary problems facing the cardiac patients.
- 3- Establishing non-invasive predictors for outcomes in different cardiovascular diseases.
- 4- Formation of research teams in the various subspecialties in cardiology.
- 5- Opening scientific channels with other departments in the faculty of medicine.
- 6- Validation of new techniques against robust gold standard techniques.

Our annual based research plan

2020:

- 1- Out come of Covid induced myocarditis.
- 2- Echocardiographic predictors of adverse outcomes in patients with Covid.
- 3- Association between laboratory markers and premature coronary artery disease.

2021

- 1- Predictors of outcomes in patients treated with primary PCI.
- 2- Role of speckle tracking echocardiography in patients with subclinical hypothyroidism.
- 3- Optimal management of patients with coronary artery ectasia.
- 4- Validation of accuracy of phase contrast flow maps CMR.

2022

- 1- Left atrial function as a predictor of outcome in hypertensive patients.
- 2- Correlation between right atrial function and exercise intolerance in patients with adult congenital heart disease.
- 3- Optimal time of intervention in patients with severe asymptomatic aortic stenosis. Multicentre study.
- 4- Relation between ischemic heart disease and rheumatoid arthritis.

2023

- 1- Prevention of chemotherapy induced cardiotoxicity. Cardiac magnetic resonance-based study.
- 2- Impact of post myocardial infarction rehabilitation on ventricular remodelling.
- 3- Optimal time of intervention in patients with intracardiac shunts based on myocardial strain imaging.
- 4- Effect of diabetes on right ventricular function.

2024

- 1- Predictors of poor outcomes of pregnant women with structural heart disease.
- 2- Comparing different invasive strategies for management of patients with acute ST elevation myocardial infarction.
- 3- Optimal anticoagulation protocol in pregnant women with mechanical prosthesis.
- 4- LA strain as a predictor for outcome in patients with ST elevation myocardial infarction.

2025

- 1- Role of recent anti-failure medication in improvement of left ventricular function. Cardiac magnetic resonance-based study.
- 2- Predictors of outcome in patients with hypertrophic cardiomyopathy.

- 3- Assessment of LV strain after full recovery of left ventricular ejection fraction in patients with previous peripartum cardiomyopathy.
- 4- Prediction of success of percutaneous balloon valvuloplasty.

Examples of ongoing researches in our department

- The association between Interleukin-27 level and premature coronary artery disease.
- Diagnostic and prognostic role of microRNA 208 in patients undergoing primary percutaneous intervention
- Assessment of left atrial volume and function by speckle tracking in hypertensive patients
- Effects of pulmonary hypertension on outcome of pregnancy with heart disease
- The impact of high-intensity interval training on ventricular remodelling in patients with a recent Non ST Segment Elevation Acute Myocardial Infarction (NSTEMI)
- Assessment of cardioprotective benefit of ACEIs in comparison to DHP-CCB in patient receiving chemotherapy using two dimensional echocardiography
- Effect of Type 2 Diabetes Mellitus on right ventricular functions: Two-Dimensional Speckle Tracking Echocardiography Based Study

- Effect of delayed PDA closure on LV function. A two dimensional strain echocardiographic study

رئيس قسم القلب

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