

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
قَالَ تَعَالَى: ﴿سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
﴿إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ﴾ ٣٢

سورة البقرة

صَدَقَ اللَّهُ الْعَظِيمُ

Dedication

To my wife for her unrelenting support.

To my teachers who teach me how to be successful, diligent and an ideal person. Who pushed me towards the

preeminence and opened for me doors for better life which is full of cooperation, harmony and sociability.

I dedicate my research and I hope that I was succeeded to satisfy all the wanted information.

Acknowledgment

I present my deepest thanks and tribute to everyone who renders a service to me and they have

the favor for me successful in
my work.

I present special thanks for my
great supervisor Dr. Hussein
Ahmed Hassan who help me,
advise and treat my rights to
perform this project.

Besides, he teaches me how the
best work can be achieved by
best working.

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Lists of Abbreviations

Acute Coronary Syndrome.
Aorta.
Anteroposterior.
Aortic Regurgitation.
Aortic Stenosis.
Atrioventricular node.
Coronary Artery Disease.
Cardiac Computed
Tomography.
Coronary Heart Disease.
Computed Tomography.
CT Angiography.
Diagonal.
Dilated Cardiomyopathy.
Electrocardiography.
Echocardiography.
End Diastolic diameter.
End Systolic diameter.
Hypertrophic Cardiomyopathy.
Inferior Vena Cava.
Left Atrium.
Left Anterior Descending
artery.
Left Anterior Oblique.
Left Circumflex.
Left Internal Mammary Artery.
Left Main Coronary Artery or

Stem.

Left Ventricle.

Milligram.

Myocardial Infarction or Ischemia.

Milliliter.

Mitral Regurgitation.

Mitral Valve.

Non ST elevation MI.

Obtuse Marginal.

Posteroanterior.

Posterior Descending Artery.

Pound/Square Inch or Pound-force/Square Inch.

Percutaneous Transluminal Coronary Angioplasty.

Posterior Wall.

Right Atrium.

Right Anterior Oblique.

Right Coronary Artery.

Restrictive Cardiomyopathy.

Right Ventricle.

Right Ventricular Outflow Tract.

Septal branch.

Sinoatrial node.

second.

Superior Vena Cava.

Saphenous Vein Graft.

Transoesophageal
Echocardiography.

Transthoracic
Echocardiography.

Ventricular Septum.

Ventricular Septal Defect.

Unstable Angina.

Abstract

The type of this study is experimental study, which done in Khartoum State in two centers of cardiac catheterization laboratories.

Many doctors request coronary angiogram for patients with changes in electrocardiographic (ECG) or echocardiographic investigations and this procedure is an invasive, high cost and high risk procedure, and many of results are normal.

The main objectives of this study are to determine the findings of ECG and echocardiography in cases of normal coronary angiograms and detect the accuracy of them in diagnosis of myocardial ischemia or infarction.

The study was based on one hundred (100) patients with clinically diagnosed of myocardial infarction or ischemic heart disease, and were grouped according to gender, male (43) patients and female (57) patients and according to age (25 - 78) years old. (1) patient had an aged between (20-29) years, (8) patients had an aged between (30-39) years, (31) patients had an aged between (40-49) years, (24) patients had an aged between (50-59) years, (18) patients had an aged between (60-69) years, (18) patients had an aged between (70-79) years.

It was concluded that the ECG had a positive findings in sixty five (65%) cases of study sample, and negative in thirty five (35%) cases of study sample. The echocardiography had a positive findings in forty five (45%) cases of study sample and negative in

fifty five (55%) cases of study sample (echocardiography has a superior accuracy in detecting myocardial infarction and ischemia than an electrocardiography because of a computerized machine but operator playing a greater role in diagnosis the exact problem).

ملخص الدراسة

تَهْدَفُ هذه الدِّراسَة إلى تحديد و إيجاد التغيرات التي يُطهرها جِهاز رسم كُهرَبائية القلب و جِهاز المَوْجات فوق الصَّوتِيَّة للقلب للمَرَضَى الَّذِينَ أُجْرِيت لَهُم عَمَلِيَّة قَسْطَرَة تَشْخِصِيَّة لِلشَّرَائِين التَّاجِيَّة و كانت تَبْجُثُها طَبِيعِيَّة و أَيْضاً تَحْدِيد دِقَّة كُلِّ مِنْ هَذَيْنِ الْجِهَارَيْنِ فِي إِكْتِشَافِ أَمْرَاضِ الشَّرَائِين التَّاجِيَّة.

إِعْتَمَدَتْ هَذِهِ الدِّراسَة على 100 عَيِّنَة مِنْ المَرَضَى الَّذِينَ شَخَّصَتْ خَالَثُهُمْ سَرِيرِيَّاً بِأَنَّهُمْ مُصَابُونَ بِالذَّبْحَةِ الصَّدْرِيَّة أَوْ إِخْتِشَاء عَصَلَةِ الْقَلْب حَيْثُ تَمَّ تَقْسِيمُهُمْ إِلَى مَجْمُوعَتَيْنِ إِسْتِئَادَا إِلَى الْجِنْس: المَجْمُوعَة الأُولَى ذُكُور وَ عَدَدُهُمْ 43 مَرِيضٍ وَ المَجْمُوعَة الثَّانِيَّة إِثَاث وَ عَدَدُهُنَّ 57 مَرِيضَة. تَمَّ تَقْسِيمُهُمْ إِلَى 6 مَجْمُوعَاتِ إِسْتِئَادَاً إِلَى العُمُر (29-20) وَ عَدَدُهُمْ (1)، (39-30) وَ عَدَدُهُمْ (8)، (49-40) وَ عَدَدُهُمْ (31)، (59-50) وَ عَدَدُهُمْ (24)، (69-60) وَ عَدَدُهُمْ (18)، (79-70) وَ عَدَدُهُمْ (18). وَ أُجْرِى لَهُمْ فَحْصَى المَوْجات فوق الصَّوتِيَّة للقلب وَ رَسَم كُهرَبائية القلب إِلا أَنَّ عَمَلِيَّاتِ القَسْطَرَة التَشْخِصِيَّة لِلشَّرَائِين التَّاجِيَّة أَظْهَرَتْ خِلَافَ ذَلِكَ.

خُلِصَتْ الدِّراسَة إِلَى أَنَّ (65%) مِنْ المَرَضَى لَدَيْهِمْ تَغْيِيرَات مَلْخُوظَة عِنْدَمَا أُجْرِى لَهُمْ رَسْم تَخْطِيطِ الْقَلْب الكُهرَبائي بَيْنَمَا (35%) مِنْهُمْ لَمْ يَظْهَرْ لَدَيْهِمْ أَى تَغْيِير. أَمَّا المَرَضَى الَّذِينَ أُجْرِى لَهُمْ فَحْص المَوْجات فوق الصَّوتِيَّة فَقَدْ أَظْهَرَتْ نَتَائِجُ المَوْجات أَنَّ (45%) مِنْهُمْ لَدَيْهِمْ أَمْرَاض فِي الشَّرَائِين التَّاجِيَّة بَيْنَمَا (55%) مِنْهُمْ لَيْسَ لَدَيْهِمْ شَيْءٌ مِمَّا يُبَيِّن مَدَى دِقَّة المَوْجات فوق الصَّوتِيَّة مُقَارَنَةً بِرَسَم كُهرَبائية القلب.