

# Ventricular E.F. & Wall Motion Scan

(4th version June 16, 2021)

## **Purposes of this study:**

1. To detect the ejection fraction of the left ventricle and the function of the wall motion of the heart.

## **Procedure of this study:**

1. Fasting is not necessary for this study.
2. On the day of the exam, you will check in at the Nuclear Medicine Department.
3. A Nuclear Medicine Technologist will explain the procedure to you. You may also be asked several important questions about your health. Next, in most cases, an injection of a small amount of medication called cold- PYP. will be injected into one of your veins (usually in your hand or elbow).
4. After the injection, there is a few minutes delay (about 15-30 minutes) before scan. This delay is necessary to allow the material to accumulate into your body. Please wait at the waiting area until the technician calls your name for image acquisition, and you may have to empty your bladder before scan.
5. The Technologist will position you on a bed under a machine called Gamma camera. Then you will receive a small amount of radiopharmaceutical called Tc-99m pertechnetate, which will be injected into one of your veins (usually around your neck) while you lying on the bed. It takes about 2 minutes after injecting, and then the needle will be removed immediately.
6. The Scan time will be about 20 minutes. It is important to remain completely still during the scan in order to achieve a high quality picture. The scanner doesn't touch you directly, and the procedure is painless.
7. If you are an inpatient, you will be returned to your hospital room. If you are an outpatient, you may go home and continue your regular activities. A report describing the findings of your scan will be sent to your physician. You should make an appointment to see your referring doctor to obtain the results of your test.
8. Any diagnostic procedure may have some risks, and you should consult your physician regarding the risks and benefits of this procedure. Tc-99m pertechnetate causes minimal side effects. The test and material are used routinely worldwide under physician supervision.

## **Other notices:**

1. If you have any possibility of pregnancy, please tell us in advance. Pregnancy is a relative contraindication to this test.

2. There is no preparation prior to this study. You may continue to eat and drink normally prior to, and after the scan. If you are on any medications, you may continue to take them.
3. Remove jewelry and any metal objects that might interfere with the images.
4. Please keep still during scanning in order to achieve a high quality picture.
5. In order to promote the excretion of radiopharmaceuticals, it is recommended to drink plenty of fluids after the exam and void frequently after injection.
6. This test is very safe. Although a radiopharmaceutical used, it is a very small amount. No severe side effect has been reported. Allergy could happen but very rare. Please do not worry. This test does not cause harm to you or your family. But for the protection of children and pregnant women's rights, avoid prolonged close contact with babies, small children, and pregnant women within the exam day (over one meter). No obvious side effects will occur when in touch with babies and pregnant women.

**Please feel free to contact us if you have any question.**

TEL: 04-23592525 extend 4801

Email: [nm@vghtc.gov.tw](mailto:nm@vghtc.gov.tw)

**Department of Nuclear Medicine  
Taichung Veterans General Hospital**