

Investigating the diagnostic value of myocardial perfusion scan in the diagnosis of coronary artery disease compared to angiography in Ardabil city in 2020 -2021

Abstract:

Background: Cardiovascular diseases are one of the most common causes of death in most parts of the world, accounting for more than 30% of deaths in developed countries. Also, various imaging methods have been developed to determine the pathology of this disease

Aim: The aim of this study is to investigate the diagnostic value of myocardial perfusion scans in the diagnosis of coronary artery disease compared to angiography in Ardabil city in 2020 and 2021.

Materials and methods: In this research, the required information was collected from the patients through a checklist. The checklist included demographic information such as age and gender. Information related to angiography, including the severity of coronary artery involvement (one vessel, two vessels or three vessels) was taken for each patient (acute infarction and stable angina) and information related to the findings of perfusion scan was collected from the patients' files.

Results: In the present study, the sensitivity, accuracy, positive predictive value and negative predictive value of myocardial perfusion scan in the diagnosis of coronary artery disease were 88.7%, 75%, 81.6% and 35.7%, respectively. In the left anterior descending artery, it was 88.6%, 74.3%, 69%, and 82%, respectively. In the left circumflex artery, it was 84%, 81%, 76%, and 86%, respectively. In the Right coronary artery, it was 77%, 76%, 74%, and 78%, respectively .

Conclusion: According to these results, it can be concluded that myocardial perfusion scanning has good accuracy and predictive value in diagnosing coronary artery disease and severity in different areas of coronary arteries.

Keywords: Myocardial perfusion scan, coronary artery disease, angiography