

Evaluation of indications and results of CT-scan and comparison of the findings of CT-scan and CXR in imam khomeyni hospital of Ardebil in 1397

Abstract

Background: Computed Tomography scan is an effective imaging method in the diagnosis of lung diseases, but due to its disadvantages, especially the high dose of radiation emitted, it should be performed according to the indication. Therefore, the aim of this study was to evaluate the indications and results of lung CT scan and compare it with chest radiographic findings of hospitalized patients with pulmonary symptoms.

Aim: Due to the harmful effects of CT scan of the lung, it should be performed only in high-risk and symptomatic patients and taking into account clinical indications.

Materials and Methods: This study was performed on 351 patients with pulmonary symptoms. After recording demographic information, indication based on ACR was also recorded. Chi-square and Fisher tests were used to compare data.

Results: The findings of our study showed that the indication for CT scan in patients with pulmonary symptoms was necessary in 66.4%, but in 14.8% it was probably necessary and in 18.8% it was unnecessary. Also, the findings of our study showed that abnormal cases of radiography and CT scan of the lungs were significantly higher at older ages, but there was no significant difference in other variables including gender, place of residence, symptoms and hospitalization. Between CT and radiography is good. Regarding the observance of the indication, it was found that there is no relationship between the observance of the indication and the variables of age, gender, place of residence, symptoms and hospital ward.

Conclusion: Due to the high percentage of unnecessary cases of CT scan in patients with lung problems, training of medical personnel on the indications for CT scan of the lungs seems necessary to reduce the frequency of unnecessary CTs in patients to reduce its harm. .

Keywords: CT scan, indication, lung