## Comparison between Frequency of brain lesion in CT scan of traumatic patient that referred to Taleghani hospital of Kermanshah in 2011 and 2014

Selah salehi zahabi\*, Karam Ahmadi\*\* Mahmuod Mehrbakhsh\*\*\*

\* Department of Radiology and Nuclear Medicine, Kermanshah university of Medical Science, Kermanshah, Iran.

\* M.Sc in Anatomy, AJA university of medical science, , 520 hospital, Kermanshah, Iran.

\*\*\*Rradiologist, Kermanshah University of medical science, Kermanshah, Iran.

sszahabi@gmail.com

**Background**: trauma is the most common reason in 1-34 years olds. In patient with multiple trauma , the head is the most common involved part. The importance of computed tomography (CT scan) in diagnosis of brain trauma is well established and CT of the brain is a choice method. Finding lesion in brain traumatic patient is very important so goal of this study is Finding of brain CT scan in traumatic patient that referred to ayatollah taleghani hospital of Kermanshah in 2011and 2014.

**methods** : in this cross-sectional an descriptive study brain CT scan finding of 907 patient in 2011 and 1005 patient in 2014 with brain trauma that referred to CT scan department of Taleghani hospital of Kermanshah was evaluated. for data collection used pre-prepared tables that contain demographic data, finding of brain lesion location and location was broken and finally data with descriptive statistics were analyzed.

**Results**: In this study in 2011showd that 67.04 % of 907 patients were male and 32.41% were in 15-34 years olds. In this study we evaluated computed tomograms of traumatic patients, 857 (94.49%) case of 907 patients have normal brain CT scan and 50 (5.51%)case have positive finding that this finding are :

11 case(22%) had brain contusion, 10 case(18%) had epidural hematoma, 8 case(16%) had, 10 case(20%) had subarachnoid hemorrhage, 8 case(16%) had intracranial hemorrhage, 4 case(08%) had intraventricel hemorrhage and 21 case (42%) skull fracture was detected.

But in other study in 2014showd that 55.09 % of 1005 patients were male and 28% were in 15-34 years old. In this study we evaluated computed tomograms of traumatic patients, 812 (82.11%) case of 1005 patients have normal brain CT scan and 50 (17.89%)case have positive finding that this finding are :

14 case(26%) had brain contusion, 7 case(13%) had epidural hematoma, 8 case(15%) had, 14 case(29%) had subarachnoid hemorrhage, 8 case(15%) had intracranial hemorrhage, 4 case(08%) had intraventricel hemorrhage and 22 case (42%) skull fracture was detected.

**Conclusion**: Our study showed that, per year on average 12% of the patients referred to Taleghani Hospital added. But the normal brain CT scan dropped from 94.49 percent to 84.12 percent . This is perhaps due to the presence Neurosurgery residents in hospital. Due to the high frequency of normal CT scan in this study and disadvantages of no indication CT scan, it is necessary for clinical physicians to pay attention and do accurate efforts because there is some concerns that the CT scan of brain is going to be a routine application.

Key words : Brain Lesion, CT scan, Trauma, Kermanshah