

Comparison of risk of pneumonia between rituximab plus CHOP with CHOP alone in patients with non-Hodgkin's lymphoma

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Background: Rituximab is used for therapy against CD20-positive B-cell non-Hodgkin's lymphoma (NHL). There have been several case reports of increased susceptibilities to infection in patients treated with rituximab. We evaluated the incidence and etiology in pneumonia of patients receiving rituximab plus CHOP (R-CHOP) and patients receiving CHOP alone (CHOP).

Methods: We reviewed retrospectively medical records of patients who was diagnosed with NHL from July, 2004 to July, 2006. Pneumonia was diagnosed on the basis of new pulmonary infiltrates plus two of the other criteria or chest CT revealing bilateral diffuse pulmonary interstitial infiltrates combined with hypoxia without hypercapnia on arterial blood gas analysis.

Result: Six out of 129 (4.7%) patients developed pneumonia during R-CHOP therapy and four out of 103 (4.8%) patients in CHOP group. In the R-CHOP group, bacterial pneumonia was 3 cases, viral pneumonia was 1 case and drug-related pneumonia was 2 cases. Compared with that, bacterial pneumonia was 2 cases, viral pneumonia and pneumocystis *jirovecii* (*Pjirovecii*) pneumonia was 1 case and drug-related pneumonia was 1 case in the CHOP group. Pneumonia-related mortality was 5.4% and 7.2% in R-CHOP group and CHOP group respectively.

Conclusion: Our results suggest that R-CHOP therapy does not raise the incidence of pneumonia including *P. jirovecii* and fungal infection compared with CHOP therapy. However, our study has been included small cases of patients. Therefore, the risk of pneumonia between two groups should be evaluated by study in the large sample size.

SEROEPIDEMIOLOGY TOXOPLASMOSIS IN NAJAFABAD OF ESFAHAN

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Background: Toxoplasmosis is one of the prevalent parasite diseases common to human and domestic animals of which cause if a protozoa called *Toxoplasma gondii*. This parasite – a phylum of protozoan – is the intracellular obligate parasite which is able to contaminate the cells in most of warm-blooded vertebrates like human and domestic and also some species of mammals and birds. Millions of people in all parts of the world are infected to chronic infection and non-symptomatic toxoplasmosis that in one way brings about dangerous issues and problems during pregnancy and before birth and in another way, causes death in people with immune compromise. According to statistics, at least one third of world population have antibody against this parasite that shows they have already been exposed to this organism. This study has been done as long as there are no enough researches concerning the contaminated prevalence of *Toxoplasma gondii* and also the frequency of cats and a frequent number of abortions in Najafabad.

Methods: In this study, 585 sample of blood serum containing 270 male and 315 female were collected by systematic cluster sampling from Najafabad and rural areas of Najafabad (Mobarake and Esfidvajan) and examined by IFAT method.

Results: Through this examination, it was found that 270 samples (%46.1) {165 female (%52.3) & 105 male (%38.8)} had antibody against *Toxoplasmosis* with different titers from 1/100 to 1/3200. Concerning the age group, it was found that the least percentage of antibodies was among the age group of 5-9 (%14.3) and the most percentage was among the age group of 30-39 (%85.2). It was also cited that the percentage of contamination was biased toward female than male that will be analyzed later.

Conclusion: This research indicate the existence of contaminated prevalence in Najafabad and rural City (Esfidvajan, Mobarake) and shows the high rate of *Toxoplasmosis* in rural areas comparing with urban areas of course.