



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## INDOLEAMINE 2, 3-DIOXYGENASE (IDO) LEVELS IN LEPROSY PATIENTS WITH POSITIVE SEROLOGY

Ago Harlim<sup>(1)</sup> - Zen Rahfiludin<sup>(2)</sup>

*Medical Faculty, Christian University Of Indonesia, Departemen Of Dermatovenereology, Indonesia, Indonesia<sup>(1)</sup> - Diponegoro University, Faculty Of Public Health, Indonesia, Indonesia<sup>(2)</sup>*

**Background:** Seropositive leprosy individuals have a tendency to experience a change into leprosy lepromatous type. Previous studies have demonstrated that the activity of indoleamine 2, 3-dioxygenase (IDO) in patients with lepromatous type leprosy is higher than those with tuberculoid type leprosy.

**Objectives :** To know the level of IDO in seropositive subjects.

**Materials and methods:** Our observational cross-sectional study was conducted in Brebes, Central Java, Indonesia. Leprosy seropositivity was determined by measuring the level of anti-phenolic glycolipid-1 IgM and IDO level using ELISA.

**Result:** Result of The IDO level in seropositive leprosy subjects was higher compared to those who were seronegative ( $p = 0.048$ ).

**Conclusion:** In the early stage of leprosy infection, a high level of IDO level can already be found; therefore, it can affect immune response and ultimately affecting further course of the disease.

**Keywords:** 3-dioxygenase, anti-phenolic glycolipid-1 IgM, indoleamine 2, seropositive leprosy

