

**O-0432 CURRENT DIAGNOSIS OF PNEUMOCYSTIS CARINII PNEUMONIA IN AIDS-PATIENTS**

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**Background.** Based on the changing disease pattern of HIV-associated pulmonary complications we conducted a prospective study in order to compare the diagnostic value of laboratory tests in patients with *P. carinii* pneumonia (PcP) and other pulmonary complications and of different identification methods of *P. carinii* in PcP patients.

**Patients and Methods.** In 217 HIV-1-infected patients we evaluated the following parameters: platelets, serum lactat dehydrogenase (LDH), total serum protein (TP), hemoglobin (Hb), and CD4+ and CD8+ T-lymphocyte count. *P. carinii* was identified in bronchoalveolar lavage fluid by May Grünwald Giemsa stain (MGG), direct immunofluorescence test (DIFT), and polymerase chain reaction (PCR). We correlated these parameters in patients with a presumptive diagnosis of PcP and compared them with those of patients suffering from other pulmonary complications.

**Results.** All patients underwent bronchoscopy. 55 patients (25.3%) had a presumptive diagnosis of PcP. The sensitivity values of MGG stain, DIFT, and PCR did not differ (99.2%, 97.3%, and 98.2%, respectively), but specificity values did it considerably (79.1%, 56.1%, and 65.9%, respectively) as well as accuracy values (93.8%, 86.2%, and 89.7%, respectively). The mean values of platelets, of LDH, and of total serum protein of PcP patients and those of patients with other pulmonary diseases differed statistically significant as well as the mean values of these parameters of PcP patients and those of patients with bacterial pneumonia. Moreover, each PcP patient had a CD4+ T-lymphocyte count of less than 200 cells/mm<sup>3</sup> blood. The CD4/CD8 ratio of PcP patients was statistically significant lower than that of patients with bacterial pneumonia.

**Conclusions.** A detection of *P. carinii* in BAL fluid is inevitable for a definitive diagnosis of a PcP. The most efficient identification method in this case is the MGG stain. Platelets, serum LDH, total serum protein, and CD4+ T-lymphocyte count should be included into the criteria for the presumptive diagnosis of PcP.

**O-0433 'URINO-DIAGNOSIS' OF SCHISTOSOMIOSIS JAPONICA, BANCROFTIAN FILARIOSIS AND LEISHMANIOSIS**Itoh M\*, Ohta N\*, Kimura E\*, Hashiguchi Y\*, Furuya M\*, Gunawardena NK<sup>§</sup>, Mirani VW<sup>§</sup>, Kanazawa T<sup>‡</sup>, Nakajima Y\*, Sho M\*, Minai M<sup>†</sup>, Daren Z<sup>†</sup>, Yan C<sup>†</sup>, Yong-Kang H<sup>†</sup> and Zhinan Z<sup>†</sup>

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In order to determine parasitic infections in patients, immuno-diagnostic methods such as ELISA have been used commonly, instead of detecting the parasites or their eggs. In the immunodiagnosis, sera have been used as a test material.

In this study, we used urine samples from patients with schistosomiosis japonica, lymphatic filariasis and leishmaniosis to detect antibodies to the corresponding antigens using ELISA. The specificity and sensitivity obtained with the urine samples were almost the same as those obtained by serum samples.

Collection of urine samples does not require trained staff, syringes and centrifuges. Furthermore, it is easy to obtain good compliance from individuals in a field survey. This non-invasive sample collection method can also reduce accidental infections caused by handling sera. Therefore, this 'urino-diagnosis' might be useful tool for epidemiological surveys of the parasitoses.