to the clinical mycologists. There is an urgent need to develop the new diagnosis procedures such as the non-culture methods though the detection of the fungal antigen and nuclear acid. The application of 1,3-b-D-Glucan (G-test) and Galactomann (GM test) as well as the PCR related procedures will be discussed in this presentation. In future, multi-centered prospective study is still needed to the better evaluation of these methods.

Systemic mycoses of local importance

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Penicillium marneffei was first isolated from the visceral organs of bamboo rats in Vietnam in 1956. It is considered as an endemic pathogen of the Southeast Asia and South China. Sporadic case reports were cases living in or having travelled to these regions. It can affect both apparent normal hosts and immunocompromised hosts such as lymphoma. In the AIDS era, outbreak of cases was reported from the North of Thailand. Between 1991-1996, there were 1,020 cases diagnosed in Chiangmai University Hospital, all were HIV-infected people. Hence, this infection is considered an AIDS-defining illness in this part of the world.

Penicilliosis marneffei was also reported in AIDS cases in Manipur State, in West India. Transmission is most likely via inhalation of infective spores in the environment. Roles of bamboo rats remain unclear. Clinical features of disseminated infection include prolonged fever (98%), anemia (75%), weight loss (70%), cutaneous lesions (70%), lymphadenopathy (52%), hepatomegaly (45%), lung involvement (35%), splenomegaly (14%), and osteolytic lesions (4%). Diagnosis can easily be made quickly by demonstrating intra- and extracellular yeasts, 3-5 micron in size, some elongated with septum centrally, on Wright's stain of the skin-scraping. Peripheral blood smear, bone marrow smear, lymphnode touch-prep are also helpful in making diagnosis. Confirmation by culture requires more time. Treatment should be started with Amphotericin B (0.6 mg/kg/d) for 2 weeks, followed by itroconazole (200 mg bid) for another 10 weeks. Secondary prophylaxis should be given to prevent relapse until immune recovery with HAART.

Another unique mycosis in this region is pythiosis, the infection caused by Pythium insidiosum. The most recognized form with high morbidity and mortality is arteritis, presenting with symptoms and signs of arterial insufficiency: intermittent claudication, chronic ischemic ulcers or limb gangrene, mainly of lower limbs. Pathologically, the infection spread along the arterial vessel wall, causing destruction, thrombosis, or aneurysmal dilatation, in the ascending fasion towards aorta. False aneurysm is observed. Aortic rupture is ultimately fatal outcome. Almost all patients have hemoglobinopathy/thalassemic syndrome and expose to this organisms in the environment such as rice field. Treatment of this entity is still problematic since it is not a true fungus and the response to the available antifungal agents is unsatisfactory. Some successful treatment reported includes the combination of itraconazole and terbinafine, and immunotherapy with Pythium Vaccine developed by Dr. Mendoza. Amputation of the affected limb is usually unavoidable. Ocular form is also devastating. It progresses from corneal ulcer, invading deeper into the globe resulting in endophthalmitis, nonresponsive to any topical antifungal agents. Enucleation or evisceration is the usual outcome. Considering its habitat in the tropic, it is likely that pythiosis is under-recognized in the Southeast Asia region, and physicians should be aware of this infection and manage early to reduce the morbidity and mortality.

Concurrent Session 15 – HIV/AIDS Treatment – Never Simple

The changes and distributions status of opportunistic infections during 6 months after HAART initiation

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Background: It is well known that OIs are the main causes of HIV/AIDS patients’ hospitalizations and deaths. With the different immune system status, the OIs spectrum is different. With the introductions of HAART, the incidence and mortality of OIs will be declined greatly. But as we know, the impaired immune system function will be reconstituted after HAART of 3–6 months at least. The OIs still have chance to happen during the first 6 months after HAART initiation. During the first 6 months, not only the side effects of the ARV drugs but also IRIS will make the diagnosis of OIs difficult.

Objective: To explore the changes and distributions status of Opportunistic Infections during 6 months after HAART initiation.

Methods: To research retrospectively and prospectively with the uniform CRF. The contents of the CRF include the data below: subject number, the date of the HAART initiation, gender, age, ARV regimen, OI status during 3 months before HAART, and 2 weeks, 2 weeks to 3 months, 3–6 months after HAART respectively, and CD4 cell counts changes of baseline, 3 months and 6 months of treatments.

Results: 93 patients had the symptom of fever during 3 months before treatments among 192 patients. The incidence of fever is 48.44%. 39 cases had the symptom of diarrhea (20.31%). 46 patients had TB (35.9%); the baseline CD4 cell count is 91/μl; after 2 weeks treatment, the fever incidence rate is 35.9%, 3.65% is new onset. The incidence rate of respiratory system disease is 29.69% (57 cases), among them only 3 cases are newly diagnosed or infected with TB. The incidences of oral thrush (12.5%) and herpes zoster (14.6%) are relatively high. The respiratory system symptom incidence rate is 2.08% at the week 2–month 3 of treatments, oral thrush (1.56%) and herpes zoster (1.56%). And there is no new TB case; there are still the cases of fever and lung disease. But the rate is very low; The CD4 cell count increased 111/μl after 6 months treatments.

Conclusions: Fever is the most common sign of the AIDS patient. The incidence of fever will be reduced greatly as the HAART continues (<0.05). And whether a patients has a fever is related with his fever status before the treatment. Swallow difficulty and pain become less (<0.05). TB, oral thrush, lung disease and herpes zoster have been reduced significantly (<0.05). The diarrhea becomes less but the difference is not significant (>0.05). Perhaps, it is because that the diarrhea is related with not only the OI but also the side effects of drugs and non-specific inflammations. We can not make the right judgements on the neuro system features and vision changes.