

The 16th ACCLS & The 40th ACMTT



... Newsletter ...

1st June 2016



Pearls and pitfalls of blood smear examination

Assoc. Prof. Jiraporn Sithithaworn, MD lectured about the blood smear examination of acute and chronic leukemia including abnormal red cell morphology. She said that most of the patients with acute myeloid leukemia (AML) die from DIC. However, with the effective drugs available nowadays, the rapid and accurate diagnosis is the key point of patients' survival rate. The AML can be distinguished from ALL by using peroxidase test. Presently, CML has been diagnosed by the abnormal blood smear examination in the young populations and also in the normal group who has no any clinical symptom. This is the reason why blood smear examination is one of the crucial tests which is able to support for disease diagnosis at the early stage. Moreover, CML also can be diagnosed by BCR-ABL presentation on chromosome 22 using FISH technology. In case of CLL, the abnormality of B-lymphocyte, the fragile cells leading to cell lysis is the cause of AIHA. The abnormality of RBC morphology also be the cause of disorder for example schistocyte status is able to induce DIC condition. On the one hand, schistocyte can be the cause of platelet increasing using automate technology. To solve this problem, manual blood smear is another test to distinguish the false positive of this abnormal condition. Keratinocyte can be the cause of hemolytic anemia whereas teardrop cells leading to bone marrow abnormalities. In summary, blood smear examination is very crucial for disease diagnosis. The rapid and accurate diagnosis is the key of efficiency treatment.



R2R Learning from success stories

R2R is the short of “Routine to Research” that means learning from the things we do routinely. Why do we need to do the research? Because even the lab test we usually do, the exceptional case is possible to be found. If we keep ignoring, it will become the limitation of the test. Moreover, if we compare the lab result with the human, lab is the honest person who always tells the trust. Just try to listen what the lab result said, huge knowledge you will get. Same as routine works, if we continuously do the experiment and collect the data systemically, when we analyze the huge data we have, maybe we can explore some new finding. The advantage of doing the research with the routine work is not only the lab problem solving but also be one of the technique to build –up the “Learning organization”.



Testing in viral infection

In this session Prof. Pilaipun puttawattana, Ph.D. lectured about the basic of virus, how they can infect into the cells, their pathogenesis including laboratory testing for viral infection such as PCR, immunochromathography etc. Specimens collection is another topic she mentioned. Good practice of specimen collection resulting to good laboratory diagnosis and effective treatment. Unqualified specimen collection can be the cause of false negative result. Moreover, she also presented some example of viral infection case studies.

Pitfalls in microbiological detection, identification and susceptibility testing

This session presented by Mr. Boonchuay Eampokalap (MT), Mr. Somsak Rahule (MT) and Assoc. Prof. Pitak Santanirand (MT, Ph.D.).

Speakers pointed out the common pitfalls in microbiology laboratory that medical technologist should be awareness such as how to interpret gram stain results, especially gram variable bacteria and how to distinguish the staining between pathogens and artifacts. Moreover, the speakers also described the flowchart of bacterial and fungal identification from clinical specimens and stated the different identification techniques between conventional and high-throughput protocols, MALDI-TOF mass spectrometry. They described the advantages of each technique and suggested how to choose highly effective biochemical testing for identifying the difficult pathogen. Last, all speakers emphasized the use of CLSI and other acceptable guidelines to help and to solve some problems during working with bacterial detection, identification and antimicrobial susceptibility testing.



After conference...Chill Out your life, Enjoy on Pattaya beach ^ _ ^



The glass house Chill out at the restaurant with private beach. Entrance is across from the embellishment theater (only 800 m. before Ambassador hotel). Various Sea foods and desserts are available under the white constructions and glass houses in the pine forest. Open daily 11 am.-12pm. (http://www.glasshouse-pattaya.com/our_locations.php)

The sky gallery Chill out at the restaurant on the beach with Thai & European foods and fresh fruit juice. The restaurant is behind Cozy beach hotel, Pattaya near Khao Phra Tamnak. Open daily 7am.-12pm. (<http://www.skygallerypattaya.com>)



The chocolate factory pattaya European style restaurant with fantastic panorama view on the cliff beside Pattaya beach. The restaurant is near "The sky gallery". Open daily 10am.-12pm.



Coffee break Chill out at romantic coffee shop with mountain views and panorama view of Pattaya city. Open daily 8am.-7pm.

Moom-A-Roi restaurant
Sea view restaurant, with romantic music at night, Soi Naglua 4 behind Bang-Ramung police station. Open daily 11am.-11 pm.



**These are a lot of fantastic places in Pattaya,
Don't miss !!
Are you ready? Let's Gooooo.**

Ref: Chill-Pai-Nai