

Kingdom of Saudi Arabia National Guard Health Affairs King Abdulaziz Medical City



DEPARTMENT OF PATHOLOGY & LABORATORY MEDICINE

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ANATOMIC PATHOLOGY

ELECTRON MICROSCOPY UNIT:

As part of the Quality Improvement, a procedure has been established as "Correcting Procedure in response to Poor Performance and Outcome. Mrs. Hanouf Al Hamdan, Electron Microscopy Technologist is preparing to go for higher studies to UK. Also, Dr. Khalid Al Saad, Director, Electron Microscopy and Mrs. Hanouf Al Hamdan are going to attend TEM 1230 Taring in Japan.

A ceremony was arranged to distribute the certificate of Electron Microscopy Training to the Residents of Anatomic Pathology.

CYTOPATHOLOGY:

The King Abdulaziz Medical City through the Cytopathology Section, Department of Pathology and Laboratory Medicine, was recently granted the privileged status of being a recognized examination site for Diagnostic Cytology examinations under the aegis of the International Academy of Cytology (IAC). This is a major achievement providing practicing cytologists in the entire Kingdom a mechanism through which to secure professional certification and credentials by the IAC.

The recently-introduced service of liquid-based specimen collection for the processing of all clinical specimens obtained through endoscopy and/or catheterization (i.e. esophageal brushings, gastric brushings, biliary tree brushings, ureter sampling etc. has proven highly successful.

By ensuring immediate fixation, hence preserved cellular architecture, such samples are devoid of problematic artifacts that are often associated with airdrying when attempting to make smear preparations. The result has been the adequate automated cytopreparations of utmost technical quality leading to increased diagnostic sensitivity, thus improved service to the patient.

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CLINICAL CHEMISTRY

The newly implemented tests are as follows:

- 1. Vitamin D3
- 2. Metanephrine
- 3. Normetanephrine
- 4. Bile acid
- 5. CA19.9
- 6. CA 15-3

There are three (3) SCDP staff have been promoted to Med Tech II.

The receptionist in the section has been promoted to Nursing Department.



HEMATOLOGY

- Mr. Waleed Al Julaif joined as an SCDP on 18th October 2008
- Mr.Ibrahim Al Shahrani (A) Supervisor was transferred to ISD
- Ms. Eman Bader was promoted from Med Tech II to Med Tech I
- Mr. Mohammed Zakour was appointed as the divisional safety officer

There are four (4) SCDP candidates joined hematology lab:

- Abdullah Al Zahrani
- Meshael Al Harbi
- Waleed Al Jailaifi
- Nouf Al Amarri



IMMUNOLOGY

The division is pleased to announce the new blood test called Allergy Testing.

Allergy is an immunological hypersensitivity reaction to a specific allergen. It is the disorder of the immune system that is often called atopy.

Allergy Blood testing includes the following:

- Total IgE
- Phadiatop- Phadiatop is specific to inhalant allergens in blood sample by FEIA method
- Specific IgE- Specific IgE is used to measure the concentration of circulating allergen specific IgE in blood sample by FEIA method

The Immunology Laboratory has a wide range of allergens available and with each result a table of normal range related to age is available for your reference.



MICROBIOLOGY

Introduction of new tests

- Introduction of new combined dual test for detection of Cryptosporidium *parvum* and Giardia *lamblia*. This is a rapid assay with 24hrs turnaround time.
- New assay for antifungal susceptibility testing. This is an E-test strip for testing yeast from blood cultures. The antibiotic panel consists of fluconazole, voriconazole, itraconazole, amphotericin B, flucytosine and caspofungin.
- New molecular MRSA assay using Gene expert system

Introduction of new methods

- Fully automated Urinalysis system for performing full chemistry and microscopy on urines. It is fully interfaced with the laboratory computer system for automatic reporting and can process 180 samples per hour. Stat samples turnaround time is 10 minutes
- Introduction of primary cell line (Rhesus monkey kidney) for improved virus isolation
- Blood culture system upgraded to a fully computerized BACT/Alert system

Educational Activity

 Many members from our lab had attended an International Symposium on 'Infections in Immunocompromised Host' in King Faisal Specialist Hospital & Research Center on 18-19 November 2008.

Training & Development

• There are four (4) SCDPs, four (4) interns, two (2) ID fellows, two (2)prescholars and one (1) pharmacist available in the lab for training at present



TOXICOLOGY

An Agilent GC-MS was delivered in June. The new GC-MS also has a flame ionisation detector which will provide a back-up for the measurement of ethanol by headspace GC (Perkin Elmer). The acquisition of a new GC-MS will ensure rapid turnaround time for drugs of abuse confirmation.

ICP-MS will be used for further development in trace element analysis.

Nabil Osairi, Shatha Al Omar and Mona Sawaji attended a specialist training on VivaTwin immunoassay in Jeddah on 30-31 August 2008.

Zeyad Al Ehaideb resigned from his post on being offered a scholarship by the Research Department for post graduate at the University of Alberta in Canada.

The Toxicology Section is offering its services to outside private institutions through the Business Centre. Test costs are available on request.



POINT OF CARE SERVICES

The Department of Pathology & Laboratory Medicine is proud to announce the arrival of Dr. Abubaker El Fatih as the Division Head of POCS.

- We will be starting a new system for tracking samples in the receiving section which will include using a Bar Code reading gun to replace the old bar code reading wand.
- The section of Receiving has started an in-service program for all the nurses who are involved in the Blood Collection of samples.

STAT LAB:

The Stat lab had started processing the following new tests:

- Cardiac Marker:
 - 1. Troponin
 - 2. CK-MB
- Coagulation:
 - 1. PT/ INR
 - 2. D-Dimer

This will avoid splitting the specimen to the main lab and improve the turn around time to the ER.



EDUCATION:

The division is participating in the training of residents enrolled in both KSU fellowship program in Pathology & Saudi Board in Anatomic Pathology. Currently we have eight (8) residents in our department. Six of them are rotating in our department as part of their training in the above-mentioned programs. In addition, two of the residents are enrolled in the prescholar program for an abroad training in pathology.

The department has one hour slide session meeting everyday in which all consultant pathologists and residents attend and review the interesting and difficult cases. There is weekly journal club meeting in which an updated and interesting published scientific articles are discussed.

RESIDENCY TRIANING PROGRAM

Four (4) Residents have successfully passed R5 exam and will be working as Consultants in their reference hospitals. Three of them have done one (1) year training at our department.

SYMPOSIUM

The Postgraduate Training Center in cooperation with Pathology and Laboratory Medicine Department to conduct the Cytopathology Review and Self Assessment Course on January 27, 2009 at Dr. Sameer Bin Huraib Auditorium. The Saudi Council for Health Specialties accredited this course with nine (9) Continued Medical Education (CME) Hours. The topics covered are FNA Thyroid, FNA Lymph Node, FNA Salivary Glands, Pap Test, Abdominal mass, CSF, Urine Fluids, Respiratory Tract, FNA Breast etc. Dr. Walid E. Khalbuss will be a featured Guest Speaker from the USA. For registration, contact Postgraduate Training Center at ext. 45951/45446.

GOOD LUCK TO VISITING PROFESSORS:

Following are the Visiting Professors joined the department as locum in December 2008:

- Dr. Deon Venter MBChB, PhD, MBA, FRCPA (Consultant, Molecular Pathology)
- Dr. Samer Z. Al Quran, MD, FCAP, FASCP (Consultant, Anatomic Pathology)
- Dr. Jane Armes, B.M, B.S, PhD, FRCPA (Consultant, Anatomic Pathology)

All of them left at the end of December 2008 and we are wishing them years and years of good health and a prosperous new year. We miss them and we hope they will come back and join us again.





WARM WELCOME TO DR. WALID KHALBUSS

The Department of Pathology at KAMC and Dr. Muhammed Ashraf Ali, Chairman of Pathology are welcoming Dr. Khalbuss who is visiting KAMC from University of Pittsburgh School of Medicine. He is an Associate Professor of Pathology & Director of Cytopathology Fellowship Program, at the University of Pittsburgh School of Medicine, Department of Pathology, Pittsburgh, PA. USA.

Dr. Khalbuss will be a distinguished speaker at the "Cytopathology Review & Self Assessment" Scientific Meeting that will be held at King Abdulaziz Medical City, Riyadh on 27th January 2009.

Dr. Khalbuss is M.D., Ph.D., M.P.H., and he is Board Certified in Anatomic Pathology, Clinical Pathology and Cytopathology. He is also Board Certified by the International Academy of Cytopathology. He helped KAMC in establishing the first Cytotechnology School in the Kingdom in 2006, when he was Consultant in our department at KAMC.

Dr. Khalbuss has to his credit 31 papers, 19 abstracts, 2 chapters in cytopathology book and one book in Soft Tissue and Bone FNAs which will be in Press March 2009.

