



17th International Conference on Pathology & Cancer Epidemiology

October 08-09, 2018 | Edinburgh, Scotland

Pathology 2018



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Mahmoud A Khalifa, RRJMHS 2018 Volume: 7

COMMON DIAGNOSTIC CHALLENGES IN GYNECOLOGIC PATHOLOGY



Mahmoud A Khalifa

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With the introduction of new cancer treatment modalities, pathologists are constantly challenged to make clinically actionable diagnoses that will guide modern therapeutics. Gynecologic oncology is one area where even minor variations in the pathologic diagnosis could significantly impact the way a clinician may tailor their plan. Neoadjuvant therapy, two-stepsurgical staging, and adjuvant radiation therapy are only few examples of what could be offered to patients depending on the clinicians' understanding of the subtle language in the pathology report. This talk will draw attention of practicing pathologists to problematic clinical scenarios that may not be immediately evident in the specimens they encounter on daily basis. In these scenarios, the clinicians may be looking for triggered features that they perceive as crucial for their planning. Defining the clinical relevance of these issues is a key to keeping the pathologists engaged as active members of the multidisciplinary management team. Real-life examples will be presented with in-depth discussions of not only the differential diagnosis, but also the clinical relevance of each of the possible diagnosis. Attendants will be able to recognize how the slight change of diagnosis, wording or even describing the salient features of their diagnosis may result in different management course. The talk will also explore tools that can help address these issues and ensure the highest patient safety. It will stimulate the discussion around considering even further solutions.

Biography

Mahmoud A Khalifa obtained his Medical degree from Cairo, Egypt where he subsequently received his Master's degree and PhD in Pathology. He trained in Pathology at the Universities of Oklahoma, George Washington and Georgetown as well as the Armed Forces Institute of Pathology in Washington, DC. He is certified by the American Board of Pathology and the Royal College of Physicians and Surgeons of Canada. He held several laboratory medicine leadership positions in distinguished North American Universities. He is currently the Medical Director of Anatomic Pathology at the University of Minnesota. His professional career focuses mainly on Gynecologic Pathology and Patient Safety.

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Paul Seegers, RRJMHS 2018 Volume: 7

IMPLEMENTATION OF SYNOPTIC REPORTING - 10 YEARS OF EXPERIENCE IN THE NETHERLANDS

Paul Seegers

PALGA, Netherlands

he detail and accuracy of pathological reporting is becoming increasingly recognised as important with the introduction of synoptic reporting (SR). In the Netherlands we started with the development of SR for Colorectal cancer and for breast cancer late 2008, based on multidisciplinary guidelines, WHO classifications and later in 2011 based on the minimal datasets of the International Collaboration on Cancer Reporting. PALGA foundation develops, distributes nation wide and maintains all the national pathology protocols for histology, cytology and molecular testing in total 27. All the pathology laboratories in the Netherlands are connected through the PALGA network, this makes distribution and maintaining on a daily bases possible. In 2012 PALGA developed a complete new framework for the use of SR in daily practice PALGA protocol module (PPM), this is because already 20-25% daily work load of a pathologist is done with synoptic reporting. With the PPM is possible to combine different protocols in one pathology report it, for example a lung resection protocol combined with the molecular testing protocol, so the clinician will receive one complete pathology report. Through the accuracy of data elements of SR, the results are very suitable for different registries. In the Netherlands we have direct connection with the National Cancer Registry, the Dutch Institute for Clinical Auditing for quality controls and with the National Institute for Public Health and the Enviroment for Population Screening on Colon Cancer and Cervical cancer. Through interoperability the pathology data are directly filling these registries without intervention of data managers, this saves time and registration burden.





Figure 1: Example SR of Breast Biopsy (in dutch)



Figure 2: Number of SR in our PALGA national data bank, untill week 45, 2017. The estimate for 2017 is > 275000 new entries.

Biography

Paul Seegers completed his education in Pathology and Cytology at the Dr. Struycken Institute in Etten-Leur and University of Applied Sciences Leiden in the Netherlands in 1985. He worked for more than 25 years in different pathology laboratories as Head of the Department of Cytology and has been Head IT & Quality Assurance Department since 2011, he is also took up the responsibility as advisor of international expert on synoptic reporting at PALGA Foundation. He is a member of the committee of the Dutch Pathology Society for population screening and co-author of the multidisciplinary guideline Cervical Cytology.

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Liang Cheng, RRJMHS 2018 Volume: 7

PRECISION CANCER DIAGNOSTICS: NEW INSIGHTS, OPPORTUNITIES AND CHALLENGES



Liang Cheng

Indiana University School of Medicine, USA

Significant progress has been made in characterizing the genomic landscape of human cancers, directly translating these approaches into clinical practice. With treatments increasingly targeted towards specific genetic anomalies in individual tumors, next generation sequencing (NGS) technology is becoming a main stay of the cancer diagnostics laboratory, providing therapeutic options for an individual patient. Multiple clinical diagnostic assays are now being routinely performed on a variety of NGS platforms, spanning from single-gene or multi-gene targeted sequencing to whole genome sequencing. Furthermore, identification of tumor-specific antigens through whole-exome sequencing has facilitated a revolution in the field of cancer immunotherapy. In this presentation, we will discuss recent progress and clinical application of genomic characterization of clinical specimens, including blood and urine samples (liquid biopsies). We will also discuss the genomic and protein biomarkers that can predict which patients are most likely to benefit from immune check point inhibition.

Biography

Liang Cheng is the inaugural Virgil H. Moon endowed Professor of Pathology and Urology at Indiana University School of Medicine, Indianapolis, Indiana, USA. Currently, he is the Director of Molecular Diagnostics and Molecular Pathology Laboratories, Chief of the Genitourinary Pathology Service, Director of the Urologic Pathology Fellowship. He is Board Certified in Molecular Genetic Pathology, Anatomic and Clinical Pathology by the American Board of Pathology. He has received numerous prestigious awards including the Stowell-Orbison Award from the United States and Canadian Academy of Pathology (USCAP) and the Koss Medal Award from the International Society of Urological Pathology (ISUP). He received the Arthur Purdy Stout Prize from the Arthur Purdy Stout Society of Surgical Pathologists in recognition of outstanding contributions to the field of surgical pathology for a surgical pathologist who is below 45 years old. He has published over 850 peer-reviewed SCI articles in high-impact scientific journals. His published work has been cited more than 36,000 times (ISI Web of Science *h-index*: 98). He authored over 100 book chapters and several books. Currently, he is an active member of over 30 Editorial Boards. He is Editor-in-Chief of "Expert Review of Precision Medicine and Drug Development". His research focuses on translational studies of genitourinary cancers and molecular diagnostics of solid tumors.

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Page 24





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Adrian M Padurean, RRJMHS 2018 Volume: 7

HOW WOULD YOU LIKE YOUR BONE MARROW, WELL DONE?

Adrian M Padurean

NeoGenomics Laboratories, Fort Myers, USA

Bone marrow specimens play a crucial role in the diagnosis of hematolymphoid neoplasms. Although with in the past 50 years significant advances have been made in immunophenotyping, cytogenetics, FISH, and molecular sciences, morphological examination of bone marrow still remains the primordial mean for diagnosing hematolymphoid disorders. Furthermore, based on the morphological findings, all other ancillary testings are directed. Therefore, an adequate bone marrow specimen plays a critical role not only in the morphological examination of the marrow, but in judiciously selecting the additional necessary tests to reach a final conclusion, meaningful for oncologists to properly treat their patients. In this presentation the audience will be introduced to the many artifacts that may preclude an adequate bone marrow examination and how they could be avoided.



Biography

Adrian M Padurean currently the Medical Director of the NeoGenomics Laboratories, Fort Myers, Florida, received his medical degree from University of Medicine Victor Babes, Timisoara, Romania. He conducted medical research at Massachusetts General Hospital/Harvard Medical School and Mount Sinai Medical Center, New York, completed his pathology residency at Regions Hospital in St. Paul, Minnesota and hematopathology fellowship at the University of Minnesota. He served as Assistant Professor at University of Minnesota Medical School, Minneapolis, and subsequently was Director of Hematology Laboratories of Wheaton Franciscan Healthcare, Milwaukee, Wisconsin. He earned an MBA in Healthcare Administration from the Quinlan School of Business at Loyola University Chicago.

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Page 38



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Sergey V Suchkov, RRJMHS 2018 Volume: 7

PERSONALIZED AND PRECISION MEDICINE AS A UNIQUE AVENUE TO HAVE THE HEALTHCARE MODEL RENEWED TO SECURE THE NATIONAL AND INTERNATIONAL BIOSAFETY Sergey V Suchkov



Sechenov University, Russia

new systems approach to diseased states and wellness Aresult in a new branch in the healthcare services, namely, personalized medicine (PM). To achieve the implementation of PM concept, it is necessary to create a fundamentally new strategy based upon the subclinical recognition of biopredictors of hidden abnormalities long before the disease clinically manifests itself. Each decision-maker values the impact of their decision to use PM on their own budget and well-being, which may not necessarily be optimal for society as a whole. It would be extremely useful to integrate data harvesting from different databanks for applications such as prediction and personalization of further treatment to thus provide more tailored measures for the patients resulting in improved patient outcomes, reduced adverse events, and more cost-effective use of health care resources. A lack of medical guidelines has been identified by the majority of responders as the predominant barrier for adoption, indicating a need for the development of best practices and guidelines to support the implementation of PM. Implementation of PM requires a lot before the current model physician-patient could be gradually displaced by a new model medical advisor-healthy person-at-risk. This is the reason for developing global scientific, clinical, social, and educational projects in the area of PM to elicit the content of the new branch.

Biography

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. In 1980, graduated from Astrakhan State Medical University and was awarded with MD. In 1985, Suchkov maintained his PhD as a PhD student of the I.M. Sechenov Moscow Medical Academy and Institute of Medical Enzymology. In 2001, Suchkov maintained his Doctor Degree at the National Institute of Immunology, Russia. From 1989 through 1995, Dr Suchkov was being a Head of the Lab of Clinical Immunology, Helmholtz Eye Research Institute in Moscow. From 1995 through 2004 - a Chair of the Dept for Clinical Immunology, Moscow Clinical Research Institute (MONIKI). In 1993-1996, Dr Suchkov was a Secretary-in-Chief of the Editorial Board, Biomedical Science, an international journal published jointly by the USSR Academy of Sciences and the Royal Society of Chemistry, UK. At present, Dr Sergey Suchkov, MD, PhD, is:

- Professor, Director, Center for Personalized Medicine, I.M.Sechenov First Moscow State Medical University and Dept of Clinical Immunology, A.I.Evdokimov Moscow State Medical and Dental University;
- Professor, Chair, Dept for Translational Medicine, Moscow Engineering Physical Institute (MEPhI), Russia
- Secretary General, United Cultural Convention (UCC), Cambridge, UK.

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