EDITORIAL
MISDIAGNOSIS OR MISSED DIAGNOSIS

Diagnosis is an important phase of medicine. Without an accurate diagnosis, it is impossible to make informed decisions about the appropriate course of treatment. Despite extensive training & experience, however, doctors may arrive at the wrong diagnosis and patients may pay a steep price of these medical mistakes. The errors of diagnosis may advance time sensitive diseases such as cancer. Patient may get unnecessary medication which may harm him. An inaccurate diagnosis can permanently compromise a patient’s faith in the health care system. The main issue with misdiagnosis is the failure to treat the actual medical problem.

Misdiagnosis or wrong diagnosis occurs when the doctor picks up the wrong illness. For example, a doctor diagnoses a patient with a gastric problem, when in fact the patient has a heart attack. The incorrect diagnosis may result from faulty medical test data including imaging and pathology reports; incomplete information reported by the patient or even lack of knowledge on the part of the doctor. Missed diagnosis means the doctor gives clean chit of good health when in fact the patient has an illness or disease. Women may be sent to a gastroenterologist for stomach symptoms but her real problem may be ovarian cancer. Delayed diagnosis means the doctor eventually makes the correct diagnosis but after significant delay. Late diagnosis is one of the more common types of diagnostic errors.

The actual percentages of mis or missed diagnosis are difficult to determine. Missed and misdiagnoses are rarely reported because there is no real mechanism for reporting them. Diagnoses that are missed, incorrect or delayed are believed to affect 10-20% of all cases, far exceeding drug errors and wrong surgeries. Misdiagnosis is much higher in emergency situations. Examples of conditions that are commonly misdiagnosed in emergency include MI, Stroke, Pulmonary Embolism and Meningitis. Appendicitis is misdiagnosed in 26 to 57% of children under the age of 12 yrs. The question arises “Is wrong diagnosis always a negligence?”

When to suspect misdiagnosis?
(i) Treatment does not seem to be working
(ii) Symptoms that don't normally occur with the given diagnosis
(iii) Condition was diagnosed solely on the basis of one lab test
(iv) Doctor attributes symptoms that are common among other conditions
(v) Clinical diagnosis, imaging and cytology don't correlate (triple test)

Tips to avoid missed or delayed diagnosis
(i) Spend time in history and clinical examination. Hand scan is always better than a CAT scan. Suspect wrong diagnosis in non-responders to your initial treatment
(ii) Get a second opinion, especially if your treatment will be invasive and difficult
(iii) Obtain a second opinion from an expert Pathologist, who specializes in particular organ or disease
(iv) Trust your intuition and discuss with the specialist doctor. You may request tests to be redone
(v) Research the information (from NET)
(vi) Make sure all clinicians coming for giving second opinion review the patient's clinical history, examination & nursing assessment

The only surprise is that, so many people are still holding onto the idea, that the conventional paradigm can help them get well and stay healthy. It shows that if nothing else, human beings are not short of faith, despite proof of insurmountable odds. And that is actually encouraging!

Dr. Dewan A K
Medical Director
PERSONALIZED CANCER GENOME TEST FROM YALE SCHOOL OF MEDICINE – NOW AVAILABLE AT RGCI & RC

Over the past decade, since the decoding of the first human genome in 2003, a quiet revolution has taken place with the recognition that molecularly targeted therapies are most effective in patients whose tumors carry specific genetic or genomic alterations. Some of these changes in gene function contribute directly to neoplastic transformation and/or progression to full malignancy, and other changes modify the behavior of cells that have already become malignant. Many of these changes are alterations of DNA sequence, such as point mutations, insertions, deletions, amplifications, inversions, and chromosomal translocations.

In the personalized cancer treatment scenario, individual mutations within tumors are assayed to determine the likelihood of response or nonresponse to specific targeted therapies. This approach to predictive testing has been termed molecular tumor profiling. Attention has shifted to high-throughput testing of tumors for dozens of predictive markers due to (a) the development of increasing numbers of molecularly targeted drugs and (b) the alterations targeted by drugs are found predominantly in certain types of cancer (or subtype) may be found with lower prevalence in a variety of other tumors. Overall, Patient / Tumor specific predictive marker analysis results in the identification of a mutation specific drug for the patient which has resulted in many more patients receiving only those drugs that are known to work for their kind of DNA mutation.

In collaboration with Precipio Diagnostics, Rajiv Gandhi Cancer Institute & Research Center (RGCI & RC) and Star Health Network, Inc are proud to offer the latest molecular tumor profiling tests for Lung, Breast, Biliary Tract, Ovarian, Acute Leukemia, Thyroid, Melanoma, Pancreas, Colorectal and Urinary Tract cancers. These tests, from the Yale School of Medicine, will be available in the very near future to RGCI oncologists and their patients.

The Tumor Profiling Laboratory at Yale-New Haven Hospital is a CLIA-certified clinical facility that performs high throughput genotyping analyses of tumor DNA to predict the sensitivity or resistance of tumors to a variety of anti-neoplastic drugs. The overall aim of the laboratory is to provide oncologists with detailed mutational profiles of their patients’ tumors so that treatment for patients may be individually optimized. The laboratory isolates DNA from tissue samples containing tumor cells and analyzes specific sites within particular genes for the presence or absence of mutations. A total of 69 actionable mutations in 10 relevant genes are tested. An actionable mutation is one that is responsive to a currently approved drug or a new drug in clinical trials.

For example in non-small cell lung cancer (NSCLC) 9 genes (EGFR, KRAS, ERBB2, BRAF, PIK3CA, AKT-1, MEK-1, ALK and ROS) are tested for more than 48 actionable mutations. The more common mutations in EGFR and KRAS are responsive to Erlotinib and Gefitinib while there are clinical trials available for mutations in ERBB2, BRAF, PIK3CA, AKT-1, MEK-1, ALK and ROS.

No other gene / mutation panel has the following benefits:
- Relevance – Oncologists / Patients receive a report that presents ONLY clinically-relevant information, focusing solely on 69 actionable mutations;
- Speed – Test results are provided within 10 days;
- Efficiency – Testing is managed through a staged & reflex protocol, ensuring that only relevant tests are conducted;
- Versatility – Diagnosis of any patient tissue from any type of organ; analysis is done on the smallest number of malignant cells, with virtually no specimen rejection

Yale Tumor Profiling Lab – Comparative Analysis

This technology ensures that physicians receive consistent, quality reporting, and are capable of providing each patient with optimal, personalized care.

1. Actionable only diagnosis – analysis of mutations providing you guidance relevant to patient treatment plan:
   i. Mutations that indicate a responsiveness to drugs
   ii. Mutations that indicate a lack of responsiveness to drugs
2. Personalized – patient-tailored Clinical Trial and drug responsiveness information
3. Expertise – diagnosis provided by MD / PhD pathologists from Yale School of Medicine
4. Innovative – Constantly updated gene / mutation panel as new drugs enter the market

About Rajiv Gandhi Cancer Institute & Research Center and Star Health Network Partnership: Star is a New York City based company that has launched a global health network connecting centers of excellence in the United States to centers of need around the world. RGCI & RC recently signed a partnership agreement with Star that provides access to their network of US hospitals, their medical expertise and advanced care capabilities. Now, RGCI & RC and its network of physicians can offer their patients cutting edge testing, accurate diagnosis and expert opinion & consultation, based on the most current discovery – for every case.

INAUGURATION OF BIOREPOSITORY

The ultimate progress in the cancer diagnosis and therapy has only been possible with the ongoing translational research that is likely to play a very important role in future as well. Hence the importance of such translation from bedside to bench and vice-versa cannot be over-emphasized. Accordingly it has become more important to collect tumor samples along with the clinical information in a systematic manner to perform a good basic science research in future.

Keeping this in mind, RGCI & RC has established a world class Biorepository to meet the needs of scientific community focused on research. This Biorepository was formally inaugurated by a philanthropist, Mr. R. K. P. Shankardass, on 16th May, 2013. The occasion was also graced by the presence of Sh. D. S. Negi, CEO, Dr. A. K. Dewan, Medical Director. Sr. Consultants, Consultants and other officials also attended the inaugural program.

Dr. Anurag Mehta
Director – Laboratory Services
RGCI & RC, Delhi, had organized a meeting on Breast Cancer on 3rd May, 2013 as “St. Gallens Consensus on Early Breast Cancer”, at Hotel Crowne Plaza, Rohini, Delhi. The meeting was declared open by Dr. D. C. Doval, Director - Medical Oncology, who explained the basic structure and overview of the Breast Cancer Meet. The meeting was moderated by Dr. Vineet Talwar, Sr. Consultant & Chief of GU Medical Oncology Services. A panel of DNB students was appointed under the aegis of Dr. Kapil Kumar, Dr. Anurag Mehta, Dr. S. K. Sharma, Dr. Sheh Rawat, Dr. Swarupa Mitra and Dr. D. C. Doval from various Departments, who answered the consensus questions posed at St. Gallens Meet. Any dichotomy or discrepancy was taken care of by the faculty members. It was a well coordinated, lively and interactive talk attended by faculty and DNB students of RGCI & RC. The felicitation of the faculty was done by Dr. Vineet Talwar.

Dr. Vineet Talwar
Sr. Consultant & Chief of GU Medical Oncology Services

RGCI & RC, Delhi, had organized Nurses Week during 6th – 11th May, 2013 on the occasion of “International Nurses Day” to acknowledge the contribution of nurses and provide a platform for recreation. The theme for this year’s International Nurses Day was “Closing the gap: Millennium Development Goals”.

Nurses’ week celebration started on 6th May, 2013 with academic session by Dr. Sheh Rawat, Sr. Consultant & Chief of Head & Neck Radiation Oncology Services, which was followed by lamp lighting by Sh. D. S. Negi, CEO, Dr. A. K. Dewan, Medical Director, Ms. Kathleen Glenda Jacobs, Chief of Nursing and educating the audience by brief history of Florence Nightingale, the founder of Modern Nursing. During the week, various activities was arranged for the Nurses, such as entertainment activities, debate, singing competition, dumb charades & quiz on patient safety, palliative & stress management by Ms. Hanife from Can Support.

On the concluding day, 11th May, 2013 there was a cultural program & magic show which was the main attraction and was enjoyed by everyone, followed by Vote of Thanks by Ms. Kathleen Glenda Jacobs.

Ms. Kathleen Glenda Jacobs / Ms. Krishna Bhatt / Ms. Victoria Massey
31st MAY – A ‘WORLD NO TOBACCO DAY’

Theme for 2013 – “Ban tobacco advertising, promotion and sponsorship”

Tobacco use is the single most preventable cause of deaths globally and is currently responsible for killing one in 10 adults worldwide.

**GOAL** – The global tobacco epidemic kills nearly 6 million people each year of which more than 6,00,000 are non smokers dying from breathing second hand smoke. Unless we act, the epidemic will kill more than 8 million people every year by 2030. More than 80% of these preventable deaths will be among people living in low and middle income countries.

To expand the fight against the tobacco epidemic, WHO introduced MPOWER Package of six proven policies

- Monitor tobacco use and prevention policies
- Protect people from tobacco smoke
- Offer help to quit tobacco use
- Warn about the dangers of tobacco
- Enforce bans on tobacco advertising, promotion and sponsorship
- Raise taxes on tobacco

Evidence shows that comprehensive advertising bans may lead to reductions in the number of people starting and continuing smoking. Statistics show that banning tobacco advertising and sponsorship is one of the most cost effective ways to reduce tobacco demand and thus a tobacco control “best buy”.

“Kill the Evil, take the Oath”

Let's all take the pledge:

“I recognize tobacco as the greatest monster of all times, killing millions across the globe. Tobacco singly causes several killer diseases such as cancer, cardiovascular and respiratory events. Therefore, I pledge to abstain from the use of tobacco and to battle the tobacco epidemic. I pledge to spread awareness about the hazards of tobacco to the population. I pledge to lead a healthy, tobacco-free lifestyle. I will say No to tobacco and will help others say No”.

Preventive Oncology Team