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Editorial

Right test cycle

The pathology laboratory is indispensible for the diagnosis, prognosis and management of patients. About 70% of clinical decisions are based on laboratory test results. A famous clinician once said "What the pathologist thinks today, the clinician acts on tomorrow". This enormous responsibility calls for an efficient communication system between the laboratory and the clinician.

For satisfactory testing the right test request should be made for the right patient with the right sample collected in the right container, using the right precautions, timings and documentation. The test should be performed and reported in the right way, and the result obtained in the right time for right interpretation, and the right clinical decision. This completes a right test cycle.

Urgent requests should be made only when life saving measures need to be made on the basis of immediate laboratory test reports. Verbal test requests should be confirmed by written requests as soon as possible. Critical (panic) levels for different tests should be determined by the laboratory, and a system should be developed for recording and immediate notifications of such reports.

Both the clinician and pathologist should be aware of the limitations and interpretations of different test results. Sometimes the distinction from what is normal and abnormal may be subject to clinical interpretation like a mildly elevated serum PSA level of 6ng/ml. All the laboratory reference ranges for tests offered should be accessible to the clinician.

Despite all precautionary efforts laboratory errors do occur. "Zero laboratory defects" is an impossible Utopian target. Even use of rigorous 6 Sigma quality measures still results in one error in three million testing. This calls for both the clinician and the laboratory to be error conscious and take preventive measures to minimize errors. The pathologist is involved in all three stages of testing: the pre-analytical, analytical and post-analytical. The clinician is also involved in the pre and post analytical stages. Only about 15% of testing errors occur in the analytical stage. This means even closer co-operation between the clinician and pathologist is required.

The margin of error while testing cytology and biopsy samples can be significant if adequate precautions are not taken. The sampling error especially in cytology can be large. Availability of relevant clinical history, imaging results, supportive laboratory results, procedural details etc. can reduce some of these errors. It is also the duty of the pathologist to ensure that the clinician has fully understood the features of rarely encountered conditions including the biological behavior of rarely diagnosed lesions. Lastly the combining the intelligence of the clinician and pathologist can result in more accurate diagnosis and provide better patient care.