LIVE DIGITAL MICROSCOPE TECHNOLOGY REVAMPS DIAGNOSTIC PRACTICE IN INDIA

n India, there have been extensive efforts recently towards innovation and research in novel medical technologies that can improve the healthcare scene in the country. With recent technological innovations in healthcare, there has been a rapid rise in adoption of smart devices by the healthcare service providers. These technologies are a huge support system for doctors to undertake disease diagnosis. With the introduction of digitalized medical device systems by top technology brands, the industry is drifting towards digital image-based Pathology analysis over the regular practice of physical slide sample testing.

With the arrival of innovative digital pathology techniques, disease diagnosis has become easier and quick. Live digital microscope is one such innovation that helps a pathologist to gain complete control of the entire recording process. With this innovation, live sharing of images has become easy. This is one of the finest digital solutions for consulting or informing off-site colleagues as live images can be shared with remote colleagues anywhere, anytime. As simple as it sounds, high resolution snapshots of single or multi-view screens are made, just by a click on the mouse.

These digital microscopes capture real-time images for live viewing and provide precise measurements within a fraction of the time taken in regular mircoscopes. The live multi-view mode helps in complex cases, displays multiple slides and stains on one screen. This not

With live images, diagnostic tools like real-time annotations such as distances and area measurements can be used without any need to save the image first. In addition to a detailed single live image, there is a possibility to show a multi-view of several live images, together on one screen. This helps in presenting different stains, of the same tissue, in one overview. As a result of this direct comparison, live diagnosis of complex cases is simplified and the time to diagnosis is dramatically reduced.

only optimizes the workflow, but can significantly decrease diagnostic time. With the evolution of digital microscope; every case can be diagnosed live, without consuming scanning time and server space.

Live digital microscope can revamp clinical diagnostic procedures:

- For precise and expert diagnosis, a detailed, crystal sharp image is essential. Through the high quality objectives and cameras, a live image is created and presented on the widescreen monitor. Contrary
- to current scanners, all displayed images are live, digital and do not need to be stored in advance
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- Some difficult and complex cases need an expert or second opinion. The live digital microscope makes live sharing of images with consultants possible, anywhere, anytime.
- Due to easy access, tumor boards will benefit optimally from sharing the real-time live slides and cases
- The live mode prevents the need for sending physical glass slides by regular post, which is unnecessarily time consuming. All cases can be viewed live and in real-time. This will save the digital storage capacity for both sender and receiver.

Overall impact of a live digital microscope in India:

 In India, where the ratio of pathologists to patients is very ordinary, live digital microscope improves the efficiency and productivity of pathologists and technicians. It enables them to connect with their peers for second opinion by sharing the live slides The live digital microscope can replace the multi-head microscope and can be used for easy documentation, image production for study, teaching, and education purposes. For meetings of pathologists, multidisciplinary team, the live digital microscope can be used instead of a microscope/camera combination.

anywhere, anytime and will largely benefit the people in tier 2 and tier 3 locations.

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With new and powerful means of diagnosis and intervention, there is huge

scope for expansion of clinical capability and improvement of patient care in the country.



NITIN SAWANT

President – IVD,

Trivitron Healthcare