

ANAND DIAGNOSTIC LABORATORY

Less stress, fewer errors: how a hematology laboratory satisfied staff and patients in one stroke

As stress levels rise, errors creep in. To minimize mistakes in their hematology workflow and maintain top-quality patient care, Dr. Ananthvikas Jayaram and Dr. Sujay Prasad of Anand Diagnostic Laboratory, India, installed Digital Cell Morphology technology to create a healthier, happier workplace for their staff.

Introduction

Hematology laboratories face many stressors – a prominent one being the handling of slides for cell differentials. This process can be disorganized, error-prone and time consuming: slide trays accumulate at workstations, can be misplaced, moved or used by colleagues, and suffer accidental breakages. Technicians must root through copious samples to find the one they need, wasting precious time and effort.

As slides pile up, stress piles on, and a stressed mind is one at risk of making mistakes. “A root cause of errors in our laboratory is staff stress,” agrees Dr. Sujay Prasad, Technical Director of Anand Diagnostic Laboratory. “When staff get stressed out, errors start creeping in.”

Established in 1974, Anand Diagnostic Laboratory provides specialized and routine diagnostic services to patients in Bangalore, India, with a strong focus on patient care and quality of results. “We take a very patient-centric approach,” explains Dr. Ananthvikas Jayaram, Chief of Lab Services at the organization. “We believe that the patient is the sole reason for our systems, and whatever we do is towards achieving our ultimate goal: to improve the care and services we can offer to the patient.”

Prioritizing the patient – always

This patient-first mentality underpins everything at Anand Diagnostic Laboratory. To continue their focus on providing the best possible care to all patients, Dr. Jayaram and Dr. Prasad wanted to ensure that every single one of the thousands of blood cell counts and differentials they process each week is performed with optimal accuracy, consistency and reliability.

To do this, they decided to rethink the very nature of their hematology workflow. Rather than sticking to a stressful and disorganized manual process based upon fragile physical slides, the laboratory sought a way to streamline their processes to improve efficiency, reduce the pressure on their staff and, crucially, minimize error.

Almost instantaneous

After exploring possible routes forward, the potential of digital cell morphology (DCM) captured the attention of both Dr. Jayaram and Dr. Prasad and fired them with enthusiasm. They installed DCM technology at their laboratory in Bangalore: a CellaVision analyzer, which has been up and running since late 2018.

Once the system was fully installed and ready to use, Dr. Jayaram immediately noticed a difference in the laboratory. Systems became integrated, workflows became streamlined, cross-consultation became easier – and pressure on staff eased off.

“The system made an impact in just a couple of days,” enthuses Dr. Jayaram. “It was revolutionary: the change was almost instantaneous.”

From physical to digital

The transformed, DCM-enabled slide review process increased efficiency and accuracy at Anand Diagnostic Laboratory, while reducing the strain and workload burden on staff. “The DCM technology makes the work a lot easier and less stressful,” says Dr. Jayaram. “Since it came in, we hardly even notice that we’re reviewing slides.”

With DCM, slides are stained before being quickly and efficiently loaded into the digital system, rather than piling up in hard-to-organize physical trays. The resulting data is represented in a clear, accessible way within a digital library, and is searchable and easy to find on demand. Moreover, results can be viewed by multiple people at the same time, from workstations both within and outside of the laboratory, reducing the amount of wasted time spent sharing and transporting slides and enabling swift, convenient collaboration.

Streamlined and collaborative

Anand Diagnostic Laboratory found that their new, lower-stress work environment freed up time for technicians to focus on other tasks, as the time and effort involved in performing manual differential counts could be redirected elsewhere. It brought a connectivity and transparency that “gives our staff a full picture, so they’re able to do more than they were doing before,” says Dr. Prasad.

The DCM technology enabled more streamlined and collaborative ways of working. Staff could, for the first time, quickly and easily work together at a distance, benefiting more from one another’s expertise and experience for cross-consultation. Technicians and pathologists no longer had to wait to physically receive slides to provide a second opinion, as they could view cell counter outcomes, flags and scatter plot data alongside DCM results on-screen at the click of a button. As DCM captures and stores slide data in a centralized digital database, personnel working in other areas –front office, reporting– and at other network locations were able to easily track the progress of a particular result without needing to check in with hematology staff.

“Our approach to working has changed completely,” adds Dr. Jayaram.

“Rather than working in isolation, I can just call up my colleague and say, ‘Have a look at this cell in this case.’ Then we can discuss over the phone, rather than me having to take the slide there to look at it. We plan to install CellaVision systems at our two smaller satellite laboratories, which we set up in the past year, too, so that everything can be done as a team and more people are part of this process –despite them not necessarily sitting in the same physical location.”

Happier staff, better results

By streamlining and digitizing their cell review processes with DCM, Anand Diagnostic Laboratory has reduced stress levels across their entire hematology workflow and helped staff feel more comfortable, fulfilled and in control of their work.

The evidence is clear in both staff attitudes and result quality, says Dr. Prasad. “When I see and speak to our staff on my daily rounds, they’re much more relaxed. When I meet pathologists in the corridor and ask, ‘How is CellaVision doing?’, they have smiles on their faces. And the discussion I hear in the department now isn’t, ‘Why haven’t I received the slide?’ but more along the lines of, ‘Have you seen this cell? This is unusual. What do you think it is?’ That switch is encouraging for me, because I know we’re headed in the right direction.”

This focus on continuing improvement is something that Dr. Prasad is keen to highlight. It motivates everyone at Anand Diagnostic Laboratory to offer ever-better services to the patient, and, according to Dr. Prasad, sits at the core of what really matters to himself, Dr. Jayaram and the laboratory as a whole. “The moment errors reduce, upstream and downstream work processes get sorted out,” he adds.

“We’re learning how we can do better today than yesterday, and how we can do even better tomorrow. This is something we keep discussing in our staff meetings: whatever we do, let’s do it right first time.”