FOCUS ON EQUIPMENT
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HOW THE DRI OCT TRITON EMPowered MY EYE CARE PRACTICE AND BUSINESS: 2 PERSPECTIVES
I purchased the DRI OCT Triton because philosophically, I believe in providing my patients the best clinical tools and technologies available. Specifically, I look for systems capable of growing with my practice – both in terms of state-of-the-art capabilities at time of launch, as well as planned updates. In the case of the Triton, I’ve discovered a device that, “out of the box,” is mechanically powerful, easy to use, and future-ready. It has provided my practice tangible clinical and business benefits, which I’m happy to share with you here.

STATE-OF-THE-ART IMAGING POWER

I’ve been using OCT technology for about 10 years, beginning with SD-OCT before upgrading to SS-OCT. To me, the clearest differences between the two technologies are speed and image quality. The Triton’s rapid imaging time produces very high-quality images with far fewer visual artifacts, as the device’s subvisible light causes patients to move and shift less during a capture. The images we take with the Triton are uniformly clear, from the vitreous and retina to deep ocular structures, including the choroid.

Because the Triton device is a multimodal imaging platform, we can leverage multiple imaging technologies simultaneously. For me, this is immensely valuable, from both patient care and efficiency perspectives. In one scan, we can ascertain key details about a patient’s macular thickness, ocular nerve health, and nerve fiber layer thickness – as well as much more.

OCT images are consistently clean, and importantly, we get far less backscatter and interruption from opacities such as cataracts and blood.

The Triton’s high capture frequency, wide image, fast processing time and multimodal profile allows me to confidently detect, diagnose, and better manage early stage disease. This is immensely valuable to me as a clinician, as I strive to provide my patients the highest-quality care possible.
PATIENT CARE BENEFITS

Beyond providing remarkable scans and photographs, the Triton has greatly improved my patient experience. First, the device’s rapid image acquisition reduces patient chair time, which is always appreciated, as everyone’s time is valuable. As I mentioned previously, the subvisible light is comfortable for patients and results in less eye movement during a scan, meaning very few image re-takes are required. This helps us get the information we need quicker and more efficiently.

Additionally, having state-of-the-art technology (the “sizzle”) that clearly shows patients their condition in explicit detail (the “steak”) greatly improves patient confidence. The Triton, with its thoughtful ergonomics, fast speed, and modern user interface, impresses patients at first glance; but it’s even more impressive, and far more impactful, when we use it as a tool to effectively educate our patients and drive patient compliance. Our practice has always strived to foster a team approach in the provision of eye care services and win patient buy-in through dialogue and patient education, and the Triton helps us achieve these goals in new and exciting ways.

PRACTICE BENEFITS

Along with clinical and patient care benefits, the Triton has provided our practice significant business benefits as well. Within weeks of acquiring the Triton, we felt completely justified in our purchase.

The device’s fast scanning speed, ease of use, and low incidence of requiring re-takes means we process patients faster while providing higher-quality care. Faster processing means we can see more patients on a given day, which directly affects our bottom line. For that reason alone, the Triton displayed clear ROI early on.

Additionally, the technological “wow factor” the device offers directly inspires patient confidence in our practice. Again, our practice has always endeavored to offer patients the newest and best technologies, and we go out of our way to educate patients on what technologies we use and why we use them. When patients feel confident about their provider, and moreover, feel they’re getting the best treatment possible, they’re more likely to return for follow-up visits, which provides opportunities for our practice to educate them on other revenue-generating services (such as nutritional supplements for macular degeneration).

Finally, in cases where the Triton’s superior image quality leads us to an early diagnosis, the technology allows us to co-manage alongside ophthalmologists much more effectively. Being able to easily profile a patient’s eye using multiple imaging modalities – and uploading this information seamlessly to a patient’s

PARTING THOUGHTS

To succeed and thrive as an eye care practitioner, one must be constantly learning, improving, and evolving. Just as we commit to continuing education, we should consider staying ahead of the technological curve, both to better serve our patients and develop our practices to their fullest potential.
As an eye care practitioner, I frequently search for tools and technologies that help me and my practice service patients faster, more effectively, and improve the overall patient experience. In that spirit, I took an early and active role researching the efficacy of swept-source optical coherence tomography (SS-OCT) technology. After gaining hands-on experience with SS-OCT and seeing its technical and patient benefits firsthand, I quickly implemented it in my own practice, via DRI OCT Triton device (Topcon Canada).

Since introducing the Triton into my practice, I’ve been routinely impressed with its ability to make OCT imaging quicker, more productive, and more patient-friendly. Here, I’ll offer my perspective on what makes SS-OCT as a technology—and the Triton as valuable imaging platform.

CLINICAL ADVANTAGES

SS-OCT penetrates the eye’s anatomical structures using a longer wavelength than spectral domain OCT (SD-OCT), producing a very high-resolution image relative to SD-OCT. The Triton device, specifically, uses a subvisible 1050μm wavelength. A longer wavelength is especially effective and useful when opaque media—such as cataracts, blood, or gas—makes clear imaging difficult. As we know, these “obstacles” are common in patients with serious or advanced disease. Swept-source devices, including the Triton, are also able to image a larger area of the eye in a shorter amount of time than legacy OCT systems, allowing practitioners to image the vitreous, retinal structure, and choroid (among other structures) in one “take,” easing time burdens.

Since implementing the Triton in our practice, we use it to image nearly every patient that walks through our doors. The device’s speed and image offer value for every patient, but I find it especially beneficial in cases where serious complications, such as pre-retinal hemorrhages and macular hole(s), are present. A group of colleagues and I recently published a set of images in Ophthalmology showcasing the Triton’s exemplary performance in this clinical area. We used combination SS-OCT and SD-OCT to image subhyaloid hemorrhages in two eyes from two patients with proliferative diabetic retinopathy.

The resulting images clearly show better image fidelity when SS-OCT was utilized alongside SD-OCT vs. relying on SD-OCT alone. This is just one example of how SS-OCT’s superior imaging capabilities help eye care practitioners better assess the eye’s anatomy and contextual factors, and subsequently, diagnose and manage ophthalmic conditions with greater nuance.

To further showcase the Triton’s technical capability, below are some case images taken from my everyday practice: in this instance, from a 43-year old female referred for a pre-refractive surgery evaluation, wherein we discovered myopic schisis using the Triton device.

![Image A](Image A)

Color photograph of the left eye.

![Image B](Image B)

Swept-source OCT montage demonstrating myopic schisis outside of the macula.

Both images were captured in one session using the Triton device.
OPERATIONAL ADVANTAGES

The Triton device includes multiple imaging modalities in one platform, which is invaluable from efficiency and ease-of-use standpoints. Having multiple technologies in one unit – including SS-OCT, en face OCT imaging, B-scan capabilities and fundus photography – frees up significant real estate in the lane, streamlines the patient journey by reducing chair time, and consolidates critical tasks for my technicians. The Triton is so efficient, our technicians frequently quarrel over who gets to use it during workups. Ultimately, that’s a good problem to have.

Its SMARTTrack™ function, for instance, allows users to set OCT scan locations by selecting the scan area on a fundus image, as well as make fundus abnormalities viewable with no additional operator steps required. We can also choose to take or import a fundus image, select the scan location, and automatically acquire a B-scan, as well as quickly retrieve and reanalyze the same location at follow-up. This is just one of many user-friendly tools the Triton offers that saves us and our patients valuable time.

PARTING THOUGHTS

Although SS-OCT is still relatively new, and subsequently, several years away from becoming standard-of-care, I urge my fellow eye care practitioners to get ahead of the curve and consider adopting SS-OCT soon. The clinical, efficiency, and ease-of-use benefits offered by modern systems – including our device of choice, the DRI OCT Triton – are invaluable when diagnosing, treating, and managing serious retinal conditions long-term.

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REFERENCES

