Beyond the Bore

December 2006

News about Philips Panorama 1.0T

Panorama 1.0T enables New Jersey imaging center to scan more diverse patient base

A 325-pound woman with a short body stature came to Saint Barnabas Ambulatory Care Center (Livingston, New Jersey, USA) complaining of pelvic and abdominal pain. She needed an MRI, but was unable to be scanned in a cylindrical system. According to Robert B. Smith, MRI supervisor at Saint Barnabas, the center's Panorama 1.0T, with its wide-open aperture, enabled technologists to comfortably position and scan her. The scan revealed that she had dilated ducts and gallstones creating a blockage.

In another case, a claustrophobic 43-year-old male needed an MRI scan to assist in investigating the cause of persistent neck pain and tingling down his arm. Previously, he refused to be scanned in a cylindrical system. When he heard about the Panorama 1.0T at Saint Barnabas, he decided to try it. The openness of the system, combined with Ambient Experience – a soothing environment that is created by using lighting, visuals and sound – allowed him to relax. The scan revealed a herniated disc.

"Patient preference was a major factor in the center s decision to purchase the Panorama 1.0T."

MR system of choice

Smith says these are just two of many examples where the Panorama 1.0T and Ambient Experience have enabled the center to scan a more diverse patient population and cater to patient preference. He explains that patient preference

Robert B. Smith, MRI supervisor, Saint Barnabas Ambulatory Care Center

was a major factor in the center's decision to purchase the Panorama 1.0T. Smith and his colleagues conducted an informal survey, showing many patients life-size pictures of the Panorama 1.0T and another high-field MR system that claims openness. When asked in which system they would prefer to be scanned, the overwhelming majority chose the Panorama 1.0T.

Another area where the Panorama 1.0T offers benefits is in scanning children. "The open environment allows the parent or caregiver to be in the room," says Smith. "They can actually hold hands with the patient or comfort them as we are imaging, reducing the need to use sedation and shortening the duration of the appointment."

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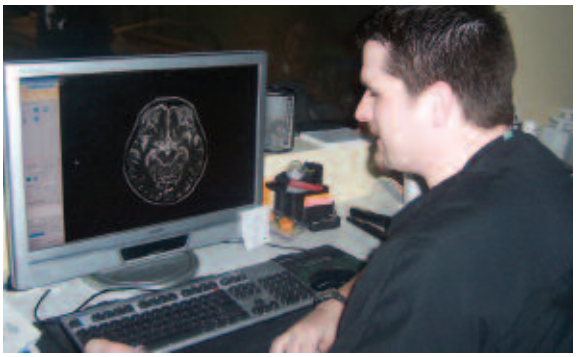
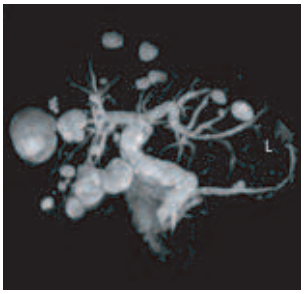
Smith continues, "The Panorama 1.0T is ideal for scanning patients that require unique positioning – for example, patients that are extremely kyphotic or have illnesses that limit their ability to lay flat on their back."

Positive response from technologists and referring physicians

"The image quality on the Panorama 1.0T rivals that of other 1.5T systems we have seen," says Smith. "This system has been fully functional. We are able to use it for a complete range of cases, from routine neuro, orthopedic and oncology imaging to more advanced scans.



Smith views an image taken on the Panorama 1.0T.



The image at left is from the case described in the opening paragraph. Magnetic Resonance Cholangio-pancreatography: Maximum Intensity Projections (MIP) show abnormal biliary/ pancreatic ductal anatomy. 3D T2-weighted TSE SPIR coronal with respiratory gating using the Body XL coil.

Plus, with the Quadrature Body coil, we have been able to scan patients over 500 pounds."

Smith says the system has been easy to use for technologists with varying levels of experience: "You can take your evening staff or your weekend staff and they're just able to follow the protocols based on simply clicking and dragging ExamCards and matching them up to correct anatomy and pathology. It's easy to use and has been phenomenal in increasing throughput."

Smith concludes, "Whether it's the true openness of the system, the image quality, the ease of use or the speed of the imaging, it's just been great. Not just for myself, but for the technologists and patients as well. I just can't say enough good things about the Panorama 1.0T."

Marketing SPOTLIGHT

In addition to outdoor and television advertising, open houses and brochures, Desert Medical Imaging (DMI) in Palm Springs, California, USA, is using a unique one-on-one marketing tactic to increase awareness of its new Panorama 1.0T. A life-size vinyl scroll is used to show referring physicians the wide-open aperture of the system (see banner at right).

John F. Feller, M.D., medical director at DMI comments, "People in waiting areas, receptionists and doctors take a good look at it and say, 'Wow, that's enormous!' It's amazing to see just how wide the scanner opening is."

The back of the banner features photos of the Ambient Experience suite at DMI that showcase the calming experience it offers for patients.

To demonstrate image quality, Dr. Feller says he shows referring physicians comparative images: "We have images from the Panorama 1.0T and the Intera 1.5T using the same protocols, same patients on the same day, and we show them both. In my experience, no one has been able to see a difference."

John F. Feller, M.D., medical director, Desert Medical Imaging (right) displays a life-size vinyl scroll along with the center's chief operating officer Paul Mezacapa.

CLINICAL CASE Study

The Panorama 1.0T allows "Beyond-the-Bore" exams that are either not possible in cylindrical scanners or extremely difficult, enabling you to offer a wider range of services to referring physicians. The clinical case study in this issue highlights the Panorama 1.0T's capability to excel in imaging large patients.

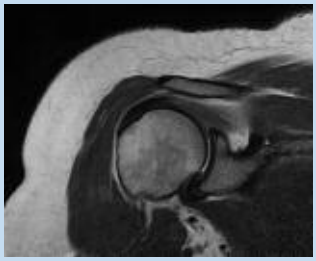
The Panorama 1.0T system's wide-open design makes it easy to accommodate large patients. In addition, its unique ST-coil design provides high SNR and enables signal penetration deep into the body. The images below are all from patients that weigh more than 300 pounds.

Imaging off-center anatomies of large patients is facilitated by the lateral tabletop movement that provides the ability to reposition at the isocenter. This enables good fat-suppression and comfortable positioning for the patient, resulting in excellent image quality.

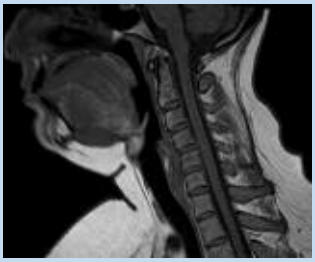
CE-MRA of the renal arteries using the **Integrated Body coil**, thk 1.5 mm, scan time 20 sec.

T2W TSE using CLEAR and respiratory triggering, thk 5.0 mm.

FFE, thk 4.0mm, scan time 4.36 min.



PDW TSE DRIVE using CLEAR, thk 4.0 mm, scan time 3.09 min.



T1W TSE using CLEAR, thk 3.0 mm, scan time 3.50 min.

T2W TSE DRIVE, thk 3.0 mm, scan time 3.30 min.

Courtesy: Nevada Imaging Centers, Las Vegas, Nevada, USA

South Shores Imaging Center, Decatur Memorial Hospital, Decatur, Illinois, USA

Patient comfort boosts throughput and reduces sedation rates

Since launching its Panorama 1.0T with Ambient Experience at South Shores Imaging Center, Decatur Memorial Hospital, Decatur, Illinois, has decreased its conscious sedation schedule for MRI exams by about 70 percent, according to Dave Overlot, executive director of radiology at the hospital. "Prior to installing the Panorama 1.0T, we were scheduling one and one-half to two days a week with patients who required conscious sedation, because they were claustrophobic or otherwise uncomfortable being scanned in a cylindrical system," says Overlot. "This added an extra half hour of pre-scan, post-scan and nursing time for each of these patients."

Overlot continues, "Patient reactions to the Panorama 1.0T have been so positive that now we schedule only an occasional conscious sedation appointment. Patients really like the new open system." Because fewer patients require sedation, it improves MRI throughput.

He cited a recent example of a claustrophobic 51-year-old female who had been scanned at the hospital twice before, both times under sedation. This time the woman, who has lumbar radiculopathy, was scanned on the new Panorama 1.0T. "Initially, the woman chose to have her significant other in the room with her during the scan," says Overlot. "She selected the Tropical Ambient Experience theme and after just a few minutes, she said she was so comfortable that he could leave the room for the remainder of the scan."

"We've also been very pleased with the Panorama 1.0T image quality," adds Overlot. "I would compare it to any of our 1.5T systems."

PANORAMA 1.0T News

Scandinavia embraces Panorama

With four new customers in the past month, Scandinavian countries are recognizing the uniqueness of the Panorama 1.0T. Sabbatsbergs Närsjukhus in Stockholm, Sweden, has the first Panorama 1.0T in clinical operation in the Nordic area. The hospital is using the system for large and obese patients as well as those with claustrophobia. With a strong focus on MR angio, Kolding Sygehus in Denmark has plans to combine the openness of the system with advanced applications. Hillerød Sygehus in Denmark plans to use its Panorama 1.0T to attract new patients and to facilitate exams for children in its pediatric department. Furthermore, the oncology department of Ullevål University Hospital in Oslo, Norway, has purchased the Panorama 1.0T to conduct clinical testing to validate the potential benefits of MR for R/T treatment planning.

Panorama 1.0T is cornerstone of MR exhibit at RSNA

RSNA 2006
Strengthening Professionalism

At the annual Radiological Society of North America show, Philips debuted the latest developments available on the Panorama 1.0T. Following last year's introduction of SmartExam for brain, Philips added SmartExam knee and spine. Clinical testing has shown that SmartExam can reduce the number of steps involved in imaging the knee from 34 to 2 – greatly improving workflow, efficiency, image quality and repeatability.

In addition, two new coils were introduced: the ST Knee coil for enhanced imaging of the knee and ankle and the ST Multipurpose L coil, which supports a wide variety of applications including shoulders, knees and kinematic imaging of the c-spine and l-spine. Both coils are now available. A coil combiner application now enables total spine/neuro exams without having to reposition the patient.

ST Knee coil

The ST SENSE Body/Spine L coil, under development, also was announced. It will be available in 2007.

New software applications for the Panorama, paralleling those available on the Achieva, also premiered. Highlights include: Asymmetrical TSE (a-TSE) that permits independent selection of various scan parameters (TE, TSE factor, echo spacing, etc.) to significantly reduce blurring and acquisition time for typical PD TSE scans of the knee, ankle shoulder and wrist; 4D THRIVE for high-resolution dynamic scanning of the liver; 4D BLISS for breast imaging; and Multi-FFE (m-FFE) that provides high SNR for enhanced imaging of areas such as the spine. These are available in Philips ExamCards and in the ScanTools Plus and ScanTools Pro packages for the Panorama 1.0T.

Note: Not all products referenced may be available for commercial distribution in Canada.

Panorama 1.0T on U.S. national television

On November 4, Philips was the sole sponsor of the nationally televised Saturday Night College Football on TBS cable. Rather than employing typical television commercials, Philips created four corporate vignettes that highlighted various Philips products. One of these spots was dedicated to Panorama 1.0T. It highlighted the orthopedic advantages that the scanner provides and demonstrated its ability to scan most everyone "from the kicker to the largest lineman." Look forward to similar public messaging in the future.

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