



Beyond the Bore

August 2006

News about Philips Panorama 1.0T

Image quality, Ambient Experience combine for strong appeal



John F. Feller, M.D.,
medical director,
Desert Medical Imaging

Dr. John F. Feller, medical director at Desert Medical Imaging (Palm Springs, California, USA) and assistant clinical professor, Stanford University Department of Radiology, had built his Palm Springs imaging center's reputation around the patient comfort virtues of an open scanner. But at 15 patients per day, he had exhausted the capacity of his 0.35T open scanner. His search

for a new scanner that could increase throughput, while maintaining his open scanner brand, brought him to the Panorama 1.0T.

"Panorama 1.0T has allowed us to increase throughput, improve image quality, and not lose the open MRI brand name in the facility."

"We're in a very competitive market," Dr. Feller points out. "The Coachella Valley has a population of about 400,000, and there are 21 scanners. That's one scanner for every 20,000 people, which makes our market more than twice as competitive as the U.S. average. So we wanted to maintain our open differentiation. But with a new 1.5T scanner in a competitive center, we also wanted image quality."

Dr. Feller continues, "Installing a Panorama 1.0T has allowed us to increase throughput, improve image quality, and not lose the open MRI brand name in the facility. So we really didn't have to compromise anything."

With the Panorama 1.0T, Desert Medical Imaging has shortened its standard slot from 45 minutes to 30 minutes. The speed a high-field system affords will enable the center to scan 25 patients per day – more than a 60 percent increase over throughput with its low-field open scanner.

Panorama 1.0T broadens center's offerings

While Dr. Feller is excited that the scanner's speed will enable Desert Medical Imaging to serve more patients, he is equally excited about the type of exams that can be done on the Panorama 1.0T.

"Before we had this system, we had to triage patients, because there were certain exams we couldn't do on our low-field open scanner," he says. "We couldn't do gadolinium bolus MR angiograms and runoffs. The intracranial MR angiograms were sub-optimal, particularly for aneurysm searches or in patients who have vasculitis.

"Image quality was sub-optimal in some of the small parts imaging, like fingers and toes, as well as in dynamic breath-hold imaging of the liver and the abdomen," Dr. Feller adds. "Spectroscopy of the brain was impossible, as was cardiac MRI. But now we no longer have to transfer any of those patients to our center with a 1.5T scanner, because we can get equivalent image quality on the Panorama 1.0T."

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PHILIPS



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ST coils key to high image quality

Dr. Feller uses a radio analogy to explain how the Solenoid Technology (ST) coils used with the Panorama 1.0T deliver the image quality of a 1.5T system.

"If you are in your car listening to the radio, one of the things that affects the quality of the transmission is how strong the broadcast signal is from the station," he

"This is the most marketable product combination I've ever had."

explains. "That's field strength. But the other influence is how good your antenna is. That's the coils. And the ST

coils are very efficient. They encircle the anatomy they are imaging, so the signal-to-noise is much better and the FOV is greater than the size of the coil."

Ambient Experience delivers additional market differentiation

While image quality attracts the attention of referring physicians, patients are drawn to the system design. Desert Medical Imaging has enhanced exams with Ambient Experience, which uses sound, lighting and projections to give patients more control over the scanning environment.

"Our patients use a plasma touch screen to choose the theme they want for their scanning experience, such



Desert Medical Imaging, Palm Springs, California, USA

as Aquatic or Tropical," Feller explains. "That theme determines the patient's visual experience during the scan. We have eight themes available now, and additional options are being developed by Philips."

Feller says the Ambient Experience provides a strong marketing message for patients. "Our message is simple, 'Why would you have a scan without the Ambient Experience?'"

"In my 15 years of experience in MR, this is the most marketable product combination I've ever had," Feller concludes. "We can market the image quality to the referring doctor, and market directly to the patient because of the comfort and Ambient Experience."

Marketing SPOTLIGHT

In December 2005, Radiologie Oberland, (Miesbach, Germany) launched a second site in Holzkirchen, Germany, a rapidly growing area south of Munich. The site features the Panorama 1.0T. Roland Scheck, M.D., head of Radiology at Oberland, explains that the center decided to purchase the Panorama 1.0T as part of its strategy to attract more patients.

Radiologie Oberland is using print advertising (initially on a local basis and now more regionally), television advertorials and public relations to market its Philips Panorama 1.0T. Dr. Scheck says the new scanner has more than doubled the catchment area for the center, attracting referrals and patients from new areas. Between January and May 2006, the number of private patients that were scanned was up by 40 percent over the same period during the previous year.

Dr. Scheck stresses the importance of showing potential patients the scanner using photos or video in promotions, so they can see how different it is from a cylindrical MRI.

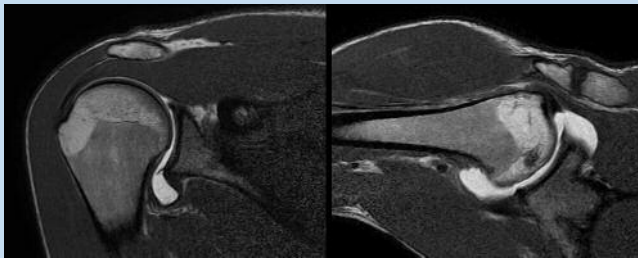


CLINICAL CASE Study

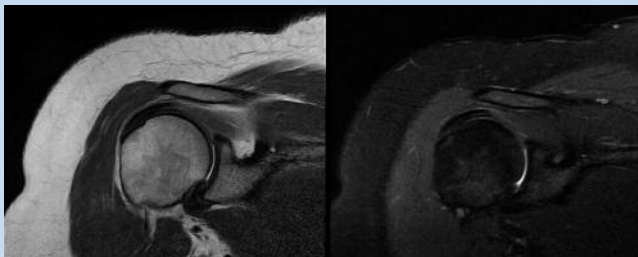
This series of clinical case studies highlights Panorama I.0T's capability to perform "Beyond-the-Bore" applications that are either not possible in cylindrical scanners or extremely difficult. Panorama I.0T thereby enables you to offer a wider range of examinations to an increased percentage of the population, resulting in improved return on investment.

The Panorama I.0T's lateral table movement enables scanning shoulders at the magnet's isocenter. This ensures optimal image quality and, if required, excellent fat suppression.

The spacious, open design of the Panorama I.0T allows scanning in different positions, such as an aber position, or doing kinematic studies of the shoulder.

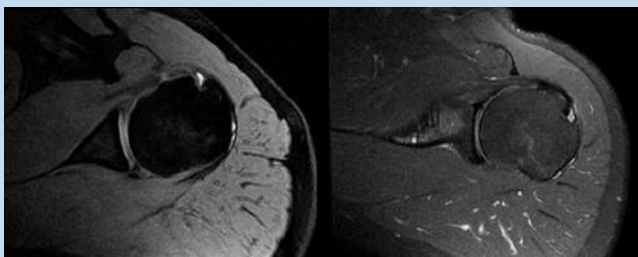


High resolution arthrography of the shoulder, TIW TSE using CLEAR, thk 3.0 mm, scan time 3:50 min.



Left: High resolution PDW using CLEAR, thk 4.0 mm, scan time 3:09 min.

Right: High resolution T2W TSE using CLEAR and SPAIR for excellent fat suppression, thk 4.0 mm, scan time 4:57 min.



High resolution 3D ProSet, thk 2.0 mm, scan time 4:00 min

Courtesy: *NEWisconsin MRI Center, Green Bay, Wisconsin, USA*
Rudolfinerhaus, Vienna, Austria
The Geneva Radiology Institute, Geneva, Switzerland



Ambient Experience at DiaSana, Mill, The Netherlands

Patients prefer Panorama I.0T at DiaSana

One of the world's most clinically robust MRI scanners also appeals to patients' comfort-seeking and aesthetic sensibilities, according to clinicians at DiaSana (Mill, The Netherlands), an independent scanning center.

Patients may select their favorite theme for the scanner suite via the Wi-Fi tablet with touch-screen. Lighting, visuals and sound in the Panorama I.0T suite are then adapted.

Ambient Experience and system openness reassure anxious and larger patients. "Many patients are pleasantly surprised that they don't have to enter a 'tunnel' for their scan," recalls DiaSana radiologist Peter Haarbrink, M.D. "When in the scanner, patients have a panoramic view of the area outside the magnet poles. And, depending on the Ambient Experience theme they select, patients may see fish swimming or watch the surf crashing on a tropical beach, among several other choices. We receive calls from patients all over the Netherlands who want to be scanned in our open MRI system with Ambient suite."

Dr. Haarbrink, a partner in DiaSana, which began operating in early 2005, added that the openness of Panorama I.0T is the ideal solution for large and obese patients. "Heavy patients above 120 kg. (264 lbs.) can be scanned in the Panorama – we don't have to gauge their suitability for a scan based on the bore diameter," he says. "Patients also aren't required to put their arms beside the body, which can enhance patient comfort and gives us more flexibility in conducting the examination."

So far, DiaSana hasn't had a single refusal from a patient to be scanned, adds DiaSana partner Ton Litjes. In fact, one claustrophobic patient was, evidently, so calmed by the Panorama's open geometry and the multicolored lighting and vistas of the Ambient suite that she fell asleep during the 30-minute scan, he says.

From an imaging performance standpoint, the system's openness also facilitates scanning of off-center anatomy, such as knees and shoulders, because technologists can position the anatomy in the magnet's isocenter, Litjes adds.

PANORAMA I.0T News

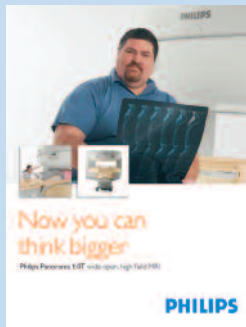
Independent proof

GfK Panel Services, an independent international marketing research firm, has conducted a patient preference study among 175 patients that were scanned in both cylindrical MR systems and the Panorama I.0T. The survey took place in Germany on different MR systems and will be extended to the United States. Results are very supportive of the Panorama I.0T and draw some impressive conclusions:

- 79 percent of all patients and almost 90 percent of obese and geriatric patients preferred the Panorama I.0T over any other cylindrical system. The remainder had no preference.
- Over 40 percent of respondents said they were willing to wait longer, travel over a longer distance or even pay more to be scanned in the Panorama.

These results support the strong business rationale for the Panorama I.0T. Look for additional reports about the patient preference study in future issues of Beyond the Bore.

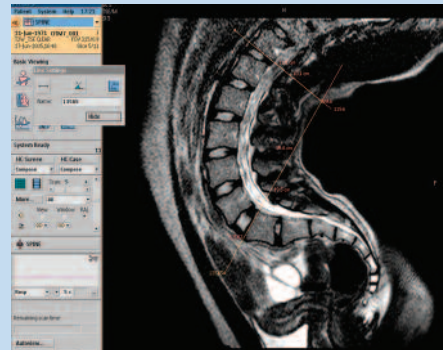
Imaging large patients



A new brochure, "Now you can think bigger," demonstrates the advantages of the Panorama I.0T for imaging large patients, many of whom simply cannot fit into a cylindrical system. Not only does the expansive patient aperture accommodate larger persons, the wide

tabletop provides a stable and comfortable support and the superb penetration depth of the ST coils ensures diagnostic image quality. Moreover, lateral tabletop movement allows imaging of off-center anatomies at the isocenter for effective fat suppression.

Extreme scanning



Ballerinas and acrobats have been scanned in extreme positions to demonstrate how the Panorama I.0T's large patient aperture enables applications hitherto impossible on cylindrical systems. This can be advantageous when the patient's problem is not evident in the normal supine position.

First Panorama I.0T sold in Japan

The prestigious Tokyo Women's Medical University has purchased the first Panorama I.0T in Japan as part of a multi-modality Philips acquisition. The system will be installed in a new 355-bed hospital that the University is opening east of Tokyo in Yachiyo City in December 2006.

Clinical benefits important in the purchase decision included: ease of positioning for trauma cases; ability to perform kinematic motion studies; and high patient acceptance of open architecture. The University plans to feature the Panorama I.0T as a key differentiator in its marketing.



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Philips Medical Systems is part of Royal Philips Electronics

www.medical.philips.com
medical@philips.com
tel: +31 40 27 87246

Philips Medical Systems
22100 Bothell-Everett Highway
Bothell, WA 98021-8431
tel: 1-800-229-6417