



EPAC specialist nurses Angela Nicholson and Debra Hamilton-Rose.

Musgrove Park switches to more compact ultrasound for early pregnancy assessment

Musgrove Park Hospital in Taunton, Somerset, has purchased a Toshiba Xario 200 ultrasound scanner for use in the hospital's early pregnancy assessment clinic.

EPAC specialist nurse Debra Hamilton-Rose said: "The process of moving over to our Toshiba Xario 200 was very smooth. It is a smaller and more compact machine compared to what we had been used to, and the heat and noise output is noticeably reduced. Staff from Toshiba made the switchover seamless and also provided training and ongoing support with any issues we encountered."

The Xario 200 offers image quality and superior workflow in an easy to handle, compact scanner. Its lightweight transducers cover a large variety of clinical applications.

With a fully customisable console, it offers a large, colour, touch-command screen to programme the system settings and access, so that a wide range of applications and examination types can be programmed into the system.

Flexible, individually customisable panel keys and smart panel layout are said to contribute towards a significant reduction in keystrokes and shortened examination time.

Toshiba's QuickStart is available with its preset orientation which enables swift execution of examinations, with easy access to measurements and annotations. QuickScan one-button image optimisation automatically adjusts parameters of B-mode and Doppler mode.

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NHS trusts to benefit from NHS Supply Chain linear accelerator deal

In collaboration with NHS trusts, the NHS Supply Chain Capital Solutions team has been working with manufacturer Elekta Limited on the latest national commitment deal for linear accelerators. The deal is intended to bring the next generation of equipment to the NHS at the most competitive price.

The contract offers trusts a choice of the Elekta Synergy, the Versa HD Select and the Versa HD systems. Structuring the deal in this way ensures a range of treatment solutions is available to clinicians, including the capability to do stereotactic radiotherapy and stereotactic radiosurgery.

NHS Supply Chain Capital Solutions

managing director Andy Brown said: "These systems are a key part of delivering world class cancer care and by using the DoH capital equipment fund to support the bulk procurement with Elekta, we have released greater value for trusts and savings back to the NHS."

Elekta senior vice president, Europe and AFLAME, François Pointier added: "This order comes on the tail of a recent study in *Radiotherapy & Oncology* journal titled "Radiotherapy in Europe: An unmet need?" and Elekta is delighted to be part of the solution by supporting the NHS in its investment to address this situation and help improve the lives of patients with cancer in the UK."

Study of patients with early stage II testicular cancer shows radiotherapy more effective than chemotherapy

A large study of testicular cancer patients has shown that radiation therapy is a better treatment than chemotherapy for patients with stage IIa disease, where one or more regional lymph nodes contain cancer cells but they are less than 2cm in diameter.

These findings, presented at the ESTRO 35 conference and published simultaneously in *Clinical Oncology*, are considered important because until now, there has been little evidence about which treatment for testicular seminoma is more effective, and there has been a tendency to move away from radiation therapy towards chemotherapy for treating stage IIa-b patients.

Guidelines from the US National Cancer Comprehensive Network recommend radiotherapy for stage IIa, while those from the European Association of Urology allow for either radiation therapy or chemotherapy; both sets of guidelines are equivocal for stage IIb. The study of 2,437

patients is the largest group of patients with stage II testicular seminoma evaluated so far, and researchers found that 99 per cent of patients with stage IIa disease were alive after five years if they had been treated with radiation therapy, versus 93 per cent of patients treated with

improvement in outcome with radiation over chemotherapy persisted after adjustments for all available factors that could introduce a bias. For patients with stage IIb disease, similar rates of overall survival were seen regardless of treatment with multi-agent chemotherapy or radiation therapy. This suggests that an individualised approach is necessary for such patients.

"The trend away from radiation therapy may be due to a misperception that it is more toxic than three or four cycles of multi-agent chemotherapy."

Study lead Dr Sushil Beriwal, associate professor of radiation oncology at the University of Pittsburgh, added: "For stage IIc patients, there is clear consensus that multi-agent chemotherapy is the preferred treatment as the risk of distant progression is high, whereas for stage IIa-b there is no such consensus as to the optimal treatment, and practice patterns vary significantly."

chemotherapy. For patients with stage IIb disease, the five-year overall survival was 95 per cent for those treated with radiation therapy and 92 per cent for those treated with chemotherapy.

Dr Scott Glaser, resident physician at the University of Pittsburgh Cancer Institute, USA, told the conference: "For patients with IIa testicular seminoma, this

"Trend away from radiotherapy may be due to a misperception that it is more toxic than three or four cycles of multi-agent chemotherapy."

Viewpoint

On a mission for patient safety in ultrasound

Husband and wife team Ann-Christiné and Björn Segall run Swedish company BBS Medical AB which has a world-wide market for its ultrasound probe test system ProbeHunter. They believe they are on a mission for patient safety in ultrasound.

Björn has been in the ultrasound business for more than 30 years, starting at Kontron with service on ultrasound and quickly moving into sales. At this point, ultrasound was a new diagnostic method and potential users needed to be convinced to try it.

"I had the opportunity to work with the best scientific people in Norway. Together with a friend I developed an interface and a solution for CW Doppler and that was my way to the position of European manager at Vingmed," he said. "In 1986 I started the company BBS Medical."

The couple met in 1983, when Ann-Christiné was working in public relations at a leading Swedish newspaper. She has also worked as a consultant for PR and marketing projects on mobile

phones, internet games and new E-commerce platforms. In 2002, BBS Medical was approached to take on First Call, an ultrasound test system, and they decided to work together on the project.

They explain that initially the biomedical engineers were reluctant and asked questions such as: "What are the OEMs going to say about this?" It took two years, several seminars and various workshops to convince the engineers that probe flaws could not be seen in an ultrasound image. "You can't see the problem, that's the problem. You need a tester - we told them," Björn explained. "We had all OEMs against us."

"Finally we got a region in Sweden to test through their inventory of probes. They had 100 systems and approximately 400 probes on service contracts. We found that 40 per cent of the probes were defective."

BBS Medical now had a proven case and many more hospitals in Scandinavia wanted to test probes and buy their own testing systems. In 2008-2010, The



Ann-Christiné and Björn Segall.

Royal Institute of Technology in Stockholm wanted to use the company's database for study purposes. The studies confirmed the results from the initial tests: 35-40 per cent of non-tested hospital probes had defects, and there were confirmed incidents on patients due to faulty probes. Another conclusion was that it was not always possible to see the problems on the screen, especially when performing Doppler.

In Scandinavia, BBS Medical continued the dialogue with the biomedical engineers and today there are demands in tenders when buying new ultra-



ProbeHunter software on a Windows touch screen device.

sound systems. OEMs must provide quality protocols with the probes and provide proof of how they monitor them over time. "This is still unique; it took BBS Medical 14 years to implement this on the Scandinavian market, but we foresee that it will

spread into Europe and then to the rest of the world," said Ann-Christiné.

Following a move that saw First Call come under the ownership of another company for internal use and leaving a gap in the market, the Segalls needed a rethink.

"It took us three months to recover and to decide what to do," said Björn. "We discussed with our customers, asked them what they wanted and everyone wanted to know more about the probes, to test in real time and some new features."

"The new project to find a programmable platform, the right R&D people began - we travelled the world," he said. "We found what we were looking for, and decided to invest. After a year we had it, and ProbeHunter was born. We made adapters to fit First Call so that users could benefit from ProbeHunter features as well."

In November 2014, the device was introduced at Medica in a closed VIP demo room and released in December the same year at

Ann-Christiné and Björn Segall BBS Medical AB

a seminar arranged by BBS and sponsored by Toshiba, Siemens and Philips. "Everyone in the business was curious as to what we had developed," said Ann-Christiné. "And many were impressed about the fast development from a small company like ours to introduce such an advanced test system for the ultrasound industry."

Since then sales have been growing, with adapters for all probe types being developed. The system is now accepted and installed by market segments including array manufacturers, hospitals, probe repair companies, distributors of ultrasound and OEMs.

"The driving force is patient safety and quality assurance, because we will all end up under a probe, and you want to know that it is fully functional," Ann-Christiné concluded.

Viewpoint is an occasional column to allow contributors to express their views and may not represent the opinion of RAD Magazine.