

Reference

Direct digital X-ray imaging with
Amadeo at the “Rückenzentrum Berlin”



Professor Dr. med. Christian Woiciechowsky specialises in neurosurgery and spine surgery. His practice opened in September 2010 and focuses on operative interventions such as the implantations of spinal disc endoprostheses - both in the cervical and lumbar regions. Therefore a large number of pre- and post-operative X-ray images is needed. Some 600 patients are treated in the practice in a period of three months, approximately 80 of which need to be X-rayed due to the nature of their condition.

Since the opening of the practice, Professor Woiciechowsky and his team have been working with a direct digital X-ray system by OR Technology. The swivel arm system is fitted with a fixed grid and a floating table. A Toshiba FDX4343R detector has been integrated into the system which is controlled via the *dicomPACS*® *DX-R* operating console.

“In my practice, most X-ray images are made of the spine, the patient being in an upright position. Functional X-ray images are particularly important. We also carry out a large number of post-operative X-ray checks after implantations. Due to the structure of the practice, short acquisition and transmission times are required. That's why I decided on a direct radiography system”, says Professor Woiciechowsky, summing up the reasons that motivated him to purchase the X-ray system by OR Technology. “I also perform fluoroscopy assisted interventions on the spine. I wanted to be able to use both an X-ray unit and a C-arm in one X-ray room. In addition, I needed a table that was suitable for the X-ray unit as well as the C-arm in case patients did need to be X-rayed in a lying position. The combination of the C-arm and the X-ray unit with the swivel arm stand was ideal for using a floating X-ray table on wheels.



The practice where I worked previously had an imaging plate system, in other words, after taking the X-ray the imaging plate had to be read in a reading unit”, says the neurosurgeon. “This procedure took about a minute. If six images had to be taken of one patient (for instance AP and from the side, function images and oblique views) the X-ray assistant in charge was busy for about ten minutes. Since I sometimes have one medical assistant working both in the consulting room and in the imaging room at the same time, I was eager to reduce the time involved in taking X-rays. With direct radiography, acquisition times are extremely short.

Professor Woiciechowsky explains the workflow from taking an image to its diagnostic evaluation: “The decision to X-ray a patient is made after the person's examination. This is documented in the administration software of my practice. Then we click on a special button to send the imaging request to the X-ray unit. The patient waits in the waiting room before being called for the X-ray examination which is performed in the X-ray room. The image then appears on the acquisition screen. From there the X-ray image is transmitted to the PACS server and briefly appears on the diagnostic evaluation monitor. The diagnostic evaluation is made in the presence of the patient and the results are recorded in the practice software.”



Since Professor Woiciechowsky not only works in his practice but also in hospital, he appreciates the uncomplicated availability of the images: “For me, mobile accessibility of images is important, i.e. when I am in hospital I can access the PACS server via a VPN line to view or download images.”

As far as repairs are concerned, Professor Woiciechowsky is content: “I am very happy with the remote maintenance and support provided. Any queries and problems are addressed and solved promptly.”



Amadeo DR systems

| with *dicomPACS*® **DX-R** Software

| X-ray Systems for the Future

Amadeo DR complete X-ray systems

Should you wish to invest in a new X-ray system, OR Technology offers a complete tailor made solution for you. An **Amadeo** DR system includes all the required components for cassette free digital X-ray imaging such as X-ray table, generator, flat panels, PC and the *dicomPACS*® **DX-R** acquisition software.

The standard package of all Amadeo systems includes integrated generator control, i.e. the *dicomPACS*® **DX-R** control console performs the complete operation of the X-ray system: from controlling the X-ray generator to the finished image, ready for diagnosis.

Complete **Amadeo** systems can be assembled from various X-ray tables, generators and flat panels.

Further information is available under www.or-technology.com



OR Technology

| Digital X-ray and
| Imaging Solutions

OR Technology (Oehm und Rehbein GmbH)
18057 Rostock, Germany, Waldemarstr. 20 g/h
Info-Hotline: +49 (0)381 - 20 36 126
www.or-technology.com, info@or-technology.com

[Stamp of distribution partner]