

Interview: Dr Thomas Mattes about Ziehm Vision RFD



<u>Q:</u> Dr. Mattes, about how many patients do you treat each year? How many conditions can be categorized as spinal surgery procedures, hip and knee operations?

<u>Dr Mattes:</u> Our center performs about 600 hip and pelvic surgeries each year, spinal procedures approx. 500. Particularly in the field of spinal surgeries and complex pelvic operations with joint-preserving procedures and pelvic fractures, a trend has emerged towards minimally invasive surgery. This reduces post-operative pain and functional limitations. Patients can thereby experience faster recovery times.

<u>Q:</u> What is the role of intraoperative imaging in minimally invasive surgery?

<u>Dr Mattes:</u> Intraoperative imaging plays a crucial role throughout the entire procedure. The ability to generate live images in 2D and 3D before, during and after the operation gives the surgeon an added level of certainty for his/her work. The depiction of anatomical structures in full detail during so-called keyhole surgery is a deciding factor in the success of the procedure and the rapid recovery of the patient.

<u>Q:</u> What was a key factor in your clinic's decision to work with the mobile C-arm Ziehm Vision RFD?

<u>Dr Mattes:</u> I had already worked with Ziehm Vision FD Vario 3D during my time at the University Hospital Ulm. This system offers both 2D and 3D X-ray imaging with a compact C-arm. When I started at the clinic in Göppingen, I campaigned for acquisition of Ziehm Vision RFD. This C-arm can be used in interdisciplinary work and fulfills most of the imaging requirements that my colleagues and I demand of a C-arm. In everyday clinical applications, our C-arm provides detailed images of anatomical structures and implant positions during orthopedic and trauma surgery. Any necessary corrections can be made



immediately. Optimized fracture reductions and correction osteotomies are thereby made possible and potential secondary interventions can be avoided. The same is true for procedures involving the spine that are performed with intraoperative imaging as a matter of principle. With digital flatpanel technology, the dose can be reduced by up to 75%, which is very important for my team and me in our daily work. The flexibility of the mobile system in different operating rooms speaks in favor of Ziehm Vision RFD, because it ensures that the system is available for use in multiple departments on short notice.

<u>Q:</u> To what extent has your working method changed due to acquisition of the imaging system?

<u>Dr Mattes:</u> The digital flat-panel detector with a size of up to 30 cm x 30 cm increases the field of view during the procedure and improves visualization, particularly during pelvic and spinal surgeries. With the large field of view, it is not necessary to reposition the C-arm during the operation in order to depict other structures. During pelvic procedures and hip TEP implants, I can use just one setting while operating to obtain the same image as with the classic pelvic overview. With Ziehm Vision RFD, I gain more image information per exposure. This can contribute to shorter operating times and, in addition, saves patients and the OR team from unnecessary dose.

<u>Q:</u> What advantages do you see with mobile imaging compared to fix installed systems?

<u>Dr Mattes</u>: At the top of the list is definitely the mobility of the C-arm. With its easy handling, the system can be rapidly up and running for use in multiple ORs. Ziehm Vision RFD can be deployed in our clinic by orthopedic and trauma surgeons, cardiologists and vascular surgeons. The cost factor also plays an important role in this regard. Thanks to its interdisciplinary application, the device achieves optimal utilization. The spacesaving mobile C-arm fits compactly in today's often cramped operating rooms and can be rapidly deployed when needed. This is where I see the advantages over fix installed systems.

<u>Q:</u> What are your expectations or wishes with regard to the further development of intraoperative imaging?

<u>Dr Mattes</u>: For me as a user, image quality and image size are a priority. We expect an even better image quality with lower dose for the patient and personnel. Technical progress will also bring with it several motorized versions of this device which will provide even simpler operation; this means reduced operating time in the OR and lower costs as a result.

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