



A plenitude of benefits

Interview with Roland Gitter, MD



Interventional cardiology in pediatrics is indeed a special subject. Pediatric anatomy is different from adult anatomy, and when it comes to radiation, maximum dose reduction is the crucial point. In the following interview, Dr. Roland Gitter, head of the catheterization lab in the pediatrics department of the National Hospital for Gynecology and Pediatrics in Linz, Austria, speaks about interventional cardiology in pediatrics and elaborates on the advantages of the new AXIOM Artis dBC biplane cath lab system.

AXIOM: "Dr. Gitter, especially in pediatrics, the patient age varies widely. How old are your patients on average?"

Dr. Gitter: "Our patients can be divided into three age groups: The largest group consists of newborns and up to one-year-olds. Then we have patients between one and ten years old, and finally there are adults with congenital heart defects –

former pediatric patients who return for control examinations on a regular basis."

AXIOM: "You are working with a biplane cardiology system, the AXIOM Artis dBC. Could you tell us about your personal experiences?"

Dr. Gitter: "In a nutshell, we are delighted with the system. As our patients are very small, steep angulations are not a problem. Image resolution is very good even in zoom formats, so we see everything we need to see during examination. One important advantage is the ability to access the patient from both sides. Let me give you an example: We once had a patient who could only be punctured from the left side. So we simply reversed the position of every other system and hence gained perfect access without any difficulty. Another advantage is that the patient's head remains accessible even when we use both planes. So there is always enough workspace for the anesthesiologist."



AXIOM: “The AXIOM Artis dBC is equipped with two planes. How do you use these planes in particular?”

Dr. Gitter: “For mere diagnostic purposes, we mainly use the monoplane version of the system instead of the biplane one, even to visualize the beating heart. But in dealing with complex heart diseases and for interventions, the use of both planes is indispensable. It enables us to see the catheter advancement much better and we save time in our clinical workflow, which is of course a big advantage for us as well as for our patients.”

AXIOM: “As we all know, radiation dose is an absolutely essential issue in pediatrics. On account of this, do you use the option of radiation-free patient positioning (CARE Position)?”

Dr. Gitter: “Yes, of course we do, because this option is a considerable advantage. The display is very good and precise. We typically use this tool to find the region of interest as quickly and comfortably as possible.”



AXIOM: “Are there any certain conditions in which you use the 60 frames per second now possible with the new imaging platform CLEAR Technology?”

Dr. Gitter: “Especially when dealing with newborns, we use the 60 frames per second option, because their hearts are beating pretty fast – at about 120 beats per minute. If contrast medium is deployed at all, we can excellently document the flow of contrast agent and the distribution in the body. Furthermore, at a frequency of 60 frames per second, we can get the diagnosis with the first scene. In comparison to examinations with 30 frames per second, we save time and we need less contrast agent, which definitely is a benefit for our patients.”

AXIOM: “Alongside the AXIOM Artis dBC, you also use the AXIOM Sensis recording system. How do you use this system?”

Dr. Gitter: “AXIOM Sensis is a very useful and user-friendly tool for the complete reporting of hemodynamic data including pulse frequencies. When both the AXIOM Artis dBC and the AXIOM Sensis are used together, patient data have to be registered only once. This saves additional time. I also like to include the congenital heart picture to illustrate the disease and therapy to my referring physicians. The biggest improvement to my personal workflow is the integration of the Artis system with the AXIOM Sensis recording systems. Now I can finish my procedure reports right after finishing the case, and all examination data are automatically incorporated in the report. So I can spend more time with my patients and their parents.”

For more detailed information, send your questions to:
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Landes Frauen- und Kinderklinik Linz/Austria

The Landes-Frauen und Kinderklinik (Provincial Hospital for Gynecology and Pediatrics) in Linz, Austria, is one of the two specialized hospitals owned by the Austrian healthcare provider *gespag*. With about 44% market share in Upper Austria and more than 9,000 employees, the company is one of the biggest healthcare enterprises in that region. Apart from the hospital in Linz, it runs 11 hospitals at 14 different locations at present. Eight of the clinics are general hospitals, the other two are specialized facilities. One of *gespag's* main goals is to provide medical care in line with the social and cultural requirements of the region. The company cooperates with various other medical facilities in the region and thus contributes to establishing comprehensive and safe treatment opportunities for its patients.

Pictures: Werner Leutner