CR cassette spot filming that supports the PTA of dialysis patients is also effective in orthopedic examinations

We introduced the SF Package, which can utilize the CR cassettes used in general radiography.

The main reason for introducing the FLEXAVISION SF Package was our incorporation of CR in general radiography. With the cassette-less X-ray R/F table that we used previously, maintenance of the developing machine was quite troublesome. The frequency of fluoroscopic examinations performed on the stomach decreased at our clinic, and after incorporating CR in general radiography, we only put fluid in the developing machine when it was needed. Eventually, we hardly used the developing machine at all, and used up developing fluid just replenishing the supply. Therefore, when FLEXAVISION was released, we selected it for its ability to allow utilization of the CR cassettes used in general radiography. This freed us from maintenance of the developing machine, and has allowed us to use the space in the former developing room more effectively.

The new system produces high-definition images that support PTA and promises to reduce exposure.

Our clinic was originally a coal-mine hospital. When the mine closed, my father purchased the hospital on the understanding that it would operate as a clinic, and set up practice. In line with the decrease in population that followed the mine closure, the number of general outpatients decreased. The dialysis patients who had been coming to us for a long time came to represent the core of our practice, and the proportion of dialysis patients is increasing. We have added FLEXAVISION to an existing general radiography system, and switch between two X-ray tubes in accordance with the type of examination. More than 900 examinations are performed at our clinic every year, most of these being radiography examinations, with fluoroscopy accounting for around 20%. The general radiography system is of the ceiling-mounted type, and is sometimes used to perform examinations without transferring the patient from a stretcher. It is also suitable for the successive imaging of patients in the standing position.

On the other hand, we use FLEXAVISION to perform procedures, the most common procedure being PTA. On average we have to perform PTA on dialysis patients with blood vessel problems once or twice a month, although sometimes we have to perform the procedure three or four times a month. With PTA, this system enables radiography during fluoroscopy, which is a convenient feature. I feel that the biggest difference with the previous system is the image quality. Extremely fine guide wires are now used in PTA. Fluoroscopic images make it easier to see these wires than the previous system did, which I feel is a significant advantage. For these reasons, I am extremely grateful to be able to use this system for PTA.

Although it is not something that I can actually feel, I am hopeful that the switch to a digital system will help to reduce the exposure dose. This is partly because I am also exposed to radiation when using guide wires and catheters in PTA.

CR cassette spot filming is also effective for general radiography in orthopedics.

We also use FLEXAVISION for general radiography. We perform general radiography if a patient has, or is suspected of having, a bone fracture, and in some cases, if bed rest is required, we admit the patient and monitor his or her progress. In these kinds of orthopedic examinations, we use FLEXAVISION in cases where it is desirable to adjust the conditions and the imaging angle under fluoroscopy before executing radiography. It is extremely convenient how the cassette quickly shifts into place during fluoroscopy to allow radiography.

Various cassette sizes are available to suit the examination.

The CR cassette size that we use most in radiography is 10” × 12”. We also perform KUB radiography in cases of ureteral calculus and DIP, and in the subsequent follow-up, and at such times, a large field of view is required. It is convenient, then, to be able to use 14” × 17” cassettes. We do occasionally perform fluoroscopic examinations of the gastrointestinal tract, and when we use CR cassette radiography in these examinations, we divide the region under investigation into two or four sections. In fluoroscopic examinations of the stomach and radiographic examinations performed for orthopedics, the bedside controller at the front of the R/F table allows me to enter the examination room and conduct the examination using the buttons at the front of the bed while directly observing the patient and giving instructions related to positioning. This is very convenient.

A word to doctors thinking of introducing this system:

I feel that the greater visibility of fine guide wires and other features afforded by the fluoroscopic images is a distinct advantage. The way the CR cassette quickly shifts into place during fluoroscopy to allow radiography is extremely useful for PTA and general radiography.