# Digital R/F



# Effective for the hysterosalpingography performed as a cutting-edge fertility treatment. Digitization helps improve image management.



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#### e perform the latest fertility treatments with equipment of the highest quality in the world

The IVF Osaka Clinic specializes in infertility treatment. We have strong ties with universities and fertility centers overseas, and have treated patients from the U.S., Asia, and Europe. Using equipment and facilities of the highest quality in the world and advanced technologies such as IVF, microinsemination, and preimplantation genetic diagnosis, we conduct comprehensive infertility treatment with a wide range of methods. We mainly use FLEXAVISION for hysterosalpingography (HSG).

# igitization reduces the effort required for image management and helps improve the level of service provided to patients

We got to know Shimadzu X-ray TV system capable of CR cassette spotfilming is extremely easy to use. We therefore introduced the same type of system to our clinic and applied it for promoting digitization.

We used to use film. The development of film, the management of developing solution, waste disposal, labeling and storage management of film required a lot of time and effort. The introduction of filmless operation has freed us from this work and made it possible to use the space previously required as a dark room. Film cannot be loaded quickly into magazines and so, in preparation for additional radiography during examinations, we had to pay a lot of attention to the number of films. With FLEXAVISION, cassettes can be easily replaced at the bedside, enabling the stress-free execution of examinations.

We introduced the SimCLINIC View image filing system, which has made it easier to manage and back up data. Images can be stored in DVDs, which helps save space. Whereas film can only be viewed by the person holding it, it is now possible to observe images at the same time in consultation and examination rooms. After an examination, the findings of the examination can be explained to the patient using a monitor in a consultation room. We provide printouts of images as a service to our patients. This can now be done quickly as we do not have to wait for films to develop.

# EXAVISION handles all the procedures required for HSG

Between January, when we introduced the new system, and now (August), we have conducted HSG on around 400 patients. This works out to around 3 to 4 patients per day. The examination involves passing a catheter into the uterine cavity, injecting contrast medium from it under fluoroscopy, observing the shape of the uterine cavity, the patency of the fallopian tubes, and subsequently, the spread of the contrast medium that is excreted from the fallopian tubes into the abdominal cavity, and performing cassette spotfilming as appropriate. It is used to detect possible causes of infertility and is performed on nearly all new patients. We use the optional upper

and lower split function for 10"x12" cassettes. The first image is captured before the contrast medium flows into the abdominal cavity in order to observe the fallopian tubes and the second image is captured when a certain amount of contrast medium has flown into the abdominal cavity. It is extremely convenient to be able to perform spotfilming using fluoroscopy to ensure well-timed image capture. Finally, in order to observe the spread of contrast medium in the abdominal cavity, plain radiography is performed on the abdomen one hour later. I think it is great that the entire series of procedures, including fluoroscopy, spotfilming, and plain radiography, can be performed with the same instrument.

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# eneral radiography can be handled quickly using the X-ray tube extension function

In addition to HSG, we perform chest radiography on patients before surgery and on staff as part of periodic medical examinations. Also, if there are requests to do so, we plan on offering a full range of general radiographic procedures. When performing chest radiography with the previous equipment, we had to change the angle of the X-ray tube, move a heavy Leider stand, and set the cassette and grid. With the newly introduced FLEXAVISION system, the X-ray extension function has eliminated this inconvenience, and made preparation and cleanup much easier. Positioning can be executed with the bedside switches next to the table while watching the radiation field lamp. Movement of the CR cassette and the X-ray tube is linked and so it is extremely easy to align them.

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### mooth operability supports patient-friendly examinations

I think that the image quality is better than that attained with the previous equipment. In fact, I have heard that Shimadzu's fluoroscopic images have a good reputation. Even when our regular staff has their day off, we see technicians from our affiliated clinics, so that examinations never stop. Overall, we have found FLEXAVISION easy to operate, and have been able to quickly put it to practical use. Cassette movement for spotfilming makes very

little noise, and allows stress-free operation. In HSG, we first bring the table to the upright position, and then after the patient has mounted the table, we take it back down to the horizontal. I think that any vertical movement of the tabletop at this time would surprise the patient and so the fixed-tabletop design helps give patients peace of mind in examinations. The bedside switches are a convenient feature as they allow the operator to keep an eye on the patient while performing operations.



A word to doctors thinking of introducing this system:

The ability to perform both general radiography using CR and fluoroscopy with a single system is a significant advantage in terms of space. The X-ray tube extension function allows chest radiography to be performed simply, and the console is so simple and easy to use that it allows the system to be used soon after installation.