

Example solution 1: Advantages of digital X-Ray with *dicomPACS*®

Without film

The chemicals that are conventionally used are health damaging. Film archives take space, and cost both time and money.

In comparison, the digital X-Ray with *dicomPACS*® offers you both an environmentally conscious and high quality alternative.

There is no need to store your diagnoses on film. With *dicomPACS*® you can view the images conveniently on your screen instead.

High quality paper print outs and film processing is made possible as well,

without the use of chemicals.

The computer-based post processing of the digital images offers even more advantages:

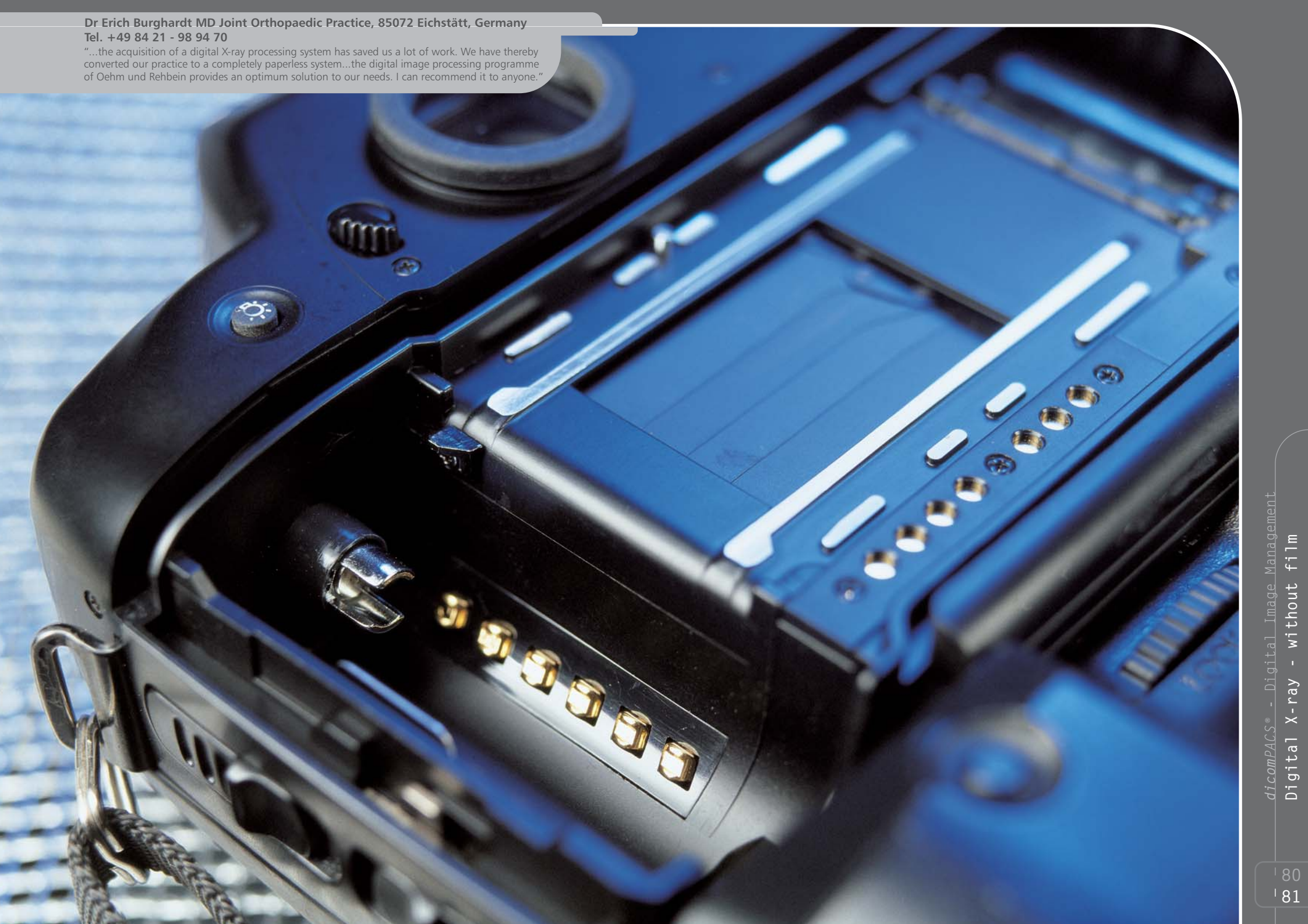
With the help of contrast intensification or enlarging, you can highlight additional details, like the smallest hairline fracture.

The display of soft tissues is possible due to manually operated dark/light variations within the same image.

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"...the acquisition of a digital X-ray processing system has saved us a lot of work. We have thereby converted our practice to a completely paperless system...the digital image processing programme of Oehm und Rehbein provides an optimum solution to our needs. I can recommend it to anyone."



X-ray:
with or without
cassettes

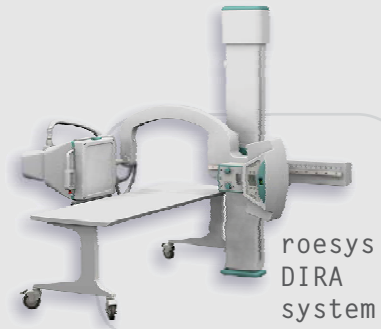
Your choice

CR systems - working with cassettes:

- optimal image quality up to 10lp/mm
- stable, sophisticated system with long market presence
- excellent cost/performance ratio, attractive also for the application in medical practices
- existing X-ray devices can generally be used further on, no alterations are necessary
- mobile CR systems can be inserted in multiple departments
- long economic life-time of the newest film storage systems at approx. 20,000 shots

Digital direct radiography - working without cassettes:

- fast transmission and availability of the diagnostic images at the work station within 10 seconds
- easy identification of incorrect images with the possibility of post-editing with system integrated adaptation software
- convenient diagnosis without film, cassette handling or film development
- simultaneous selection of organ specific parameter by icons, which realise the entire control of the X-ray device



roesys
DIRA
system



Kodak DirectView
CR 850 system



FUJI
FCR XG1

Kodak DirectView
CR 500 system



Digital long leg and spine images

All or nothing

With the help of our **dicomPACS**[®] serial modules, you can register vertical bone images of a standardised spine or leg density, as well as optimal image survey of the bone and muscle area, is achievable.

The height-adjustable wall apparatus allows you to simultaneously expose up to four cassettes (Kodak system). The positioning of patients of different heights is simple.

You only need to use the appropriate number of cassettes: two, three or four. By the means of integrated counter

weight, it is very easy for your personnel to adjust the cassette holder. Processed digital image data is well sorted by editing software, turned and seamlessly joined together in one single image.

Manual intervention, as you might know from other systems, is no longer necessary.

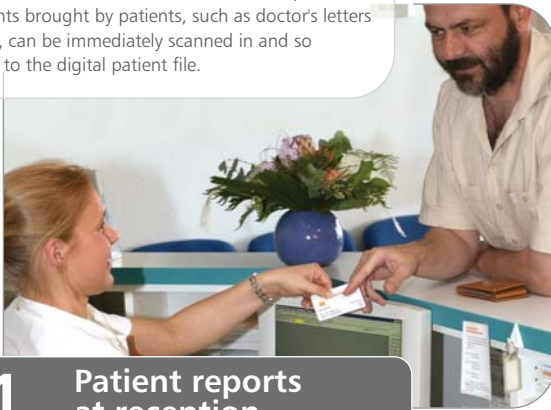
The oblong images that are produced in this way are suitable for monitor display diagnostics as well as printout on films for light box diagnostics.



Kodak DirectView CR long form imaging system

Height adjustable for digital long leg and spine images

Patient data is entered into the PC, or called up. Documents brought by patients, such as doctor's letters or X-rays, can be immediately scanned in and so attached to the digital patient file.

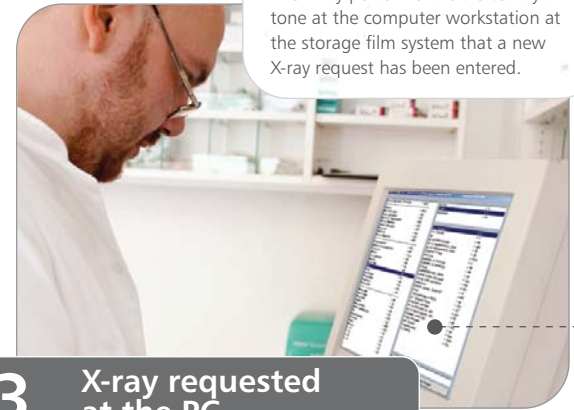


1. Patient reports at reception



Before the appointment the doctor can call up an accurate assessment of the patient's status with the help of the digital patient file.

2. Examination by doctor



The X-ray personnel are alerted by a tone at the computer workstation at the storage film system that a new X-ray request has been entered.

3. X-ray requested at the PC

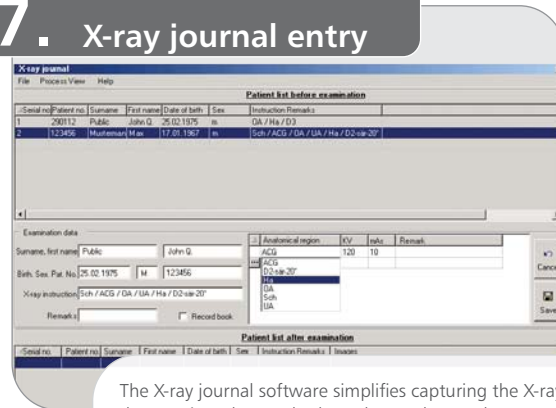
Patient's in digital X-raying

6. Printing out the X-ray image



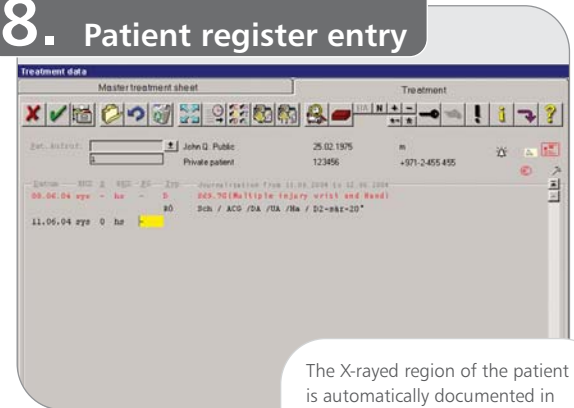
The cassette is inserted into the film storage apparatus and read out within seconds. The image processing parameters are automatically selected by anatomical region. On-screen adaptations inverting, rotating, contrast, brightness or parameter changes can be done carried out before the image is relayed by the network.

7. X-ray journal entry

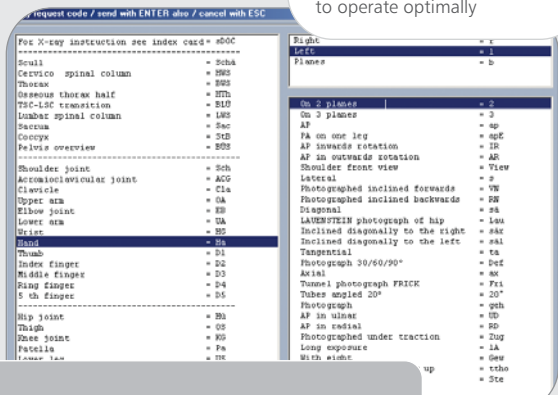


The X-ray journal software simplifies capturing the X-ray data. Patient data and other relevant data such as anatomical region are captured. The level of X-ray radiation dosage or sum of dosages is also automatically captured in the X-ray journal, if it is supported by the X-ray equipment.

8. Patient register entry

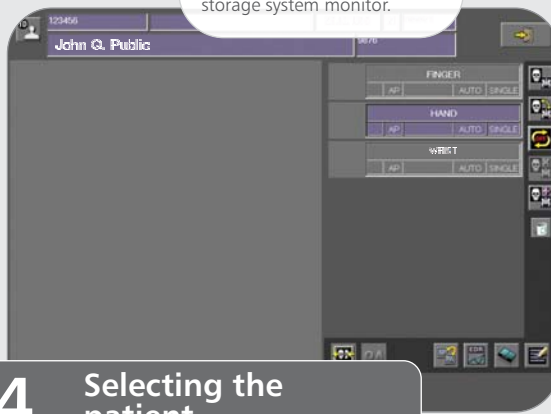


The X-rayed region of the patient is automatically documented in the patient register.



X-ray request

The ergonomic window allows even the computer-illiterate user to operate optimally



4. Selecting the patient

The X-ray request automatically appears on the film storage system monitor.



5. X-raying the patient

The region specified by the request is X-rayed by conventional equipment and a re-usable storage film (IP) cassette.

Steps

by CR systems

9. The digital X-ray image



The X-ray is now available as high-quality image at all diagnostic and viewing stations. A network interface for communicating with the administration system ensures that the images and diagnoses are allocated to the appropriate patient data.

10. Diagnosis



Optimal image quality is realised on high-resolution monitors.

11. Relaying X-ray images



X-rays (and free viewing software) can be burnt onto a CD in their original quality and given to the patient for the use of a doctor for subsequent treatment. Diagnostic images can also be printed out by a high-resolution laser printer. The transfer of images, diagnoses and patient data can also be transferred by telephone or e-mail to other practices or hospitals under the most stringent security conditions.

The digital X-ray journal

Simple documentation

Our X-ray journal software offers you a visible record of X-rays as required by law.

All information, such as anatomical region or patient and admission data is immediately available in the journal software. In addition, a direct connection to an X-ray generator or surface dosage meter for capturing exposure data is also possible.

Manual entries of patient details, e.g. pregnancy status, can be made in the fields provided in the journal. Apart from this pure registration facility of data, the

digital X-ray book also allows you to extract relevant statistics.

For instance, you can display all admissions for a day or per patient and immediately access them for evaluation. Keeping the record book up to date also becomes simple: simply hand the patient the automatic printout of a daily record of his data.



X-ray journal

File Process View Help

Patient list before examination

Serial no	Patient no	Surname	First name	Date of birth	Sex	Instruction	Remarks
1	290112	Public	John Q.	25.02.1975	m	DA / Ha / D3	
2	123456	Musterman	Max	17.01.1967	m	Sch / ACG / DA / UA / Ha / D2-sär-20°	

Examination data

Surname, First name: Public John Q.

Birth, Sex, Pat. No.: 25.02.1975 M 123456

X-ray instruction: Sch / ACG / DA / UA / Ha / D2-sär-20°

Remarks: Record book

Anatomical region	KV	mAs	Remark
ACG	120	10	
ACG			
D2-sär-20°			
Ha			
DA			
Sch			
UA			

Buttons: Cancel, Save

Patient list after examination

Serial no.	Patient no.	Surname	First name	Date of birth	Sex	Instruction	Remarks	Images

X-ray data documentation on X-ray journal software