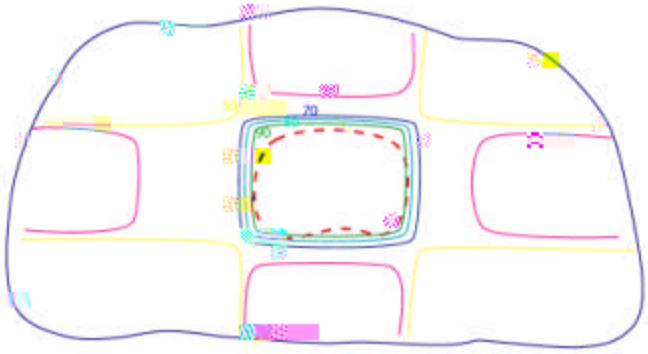
RADIATION THERAPY DATA SUBMISSION REQUIREMENTS
THE RADIOLOGICAL PHYSICS CENTER

DATA SUBMISSION



6. IMAGES FOR EXTERNAL BEAM PLANNING AND DELIVERY

Various types of images are used in radiotherapy planning, including CT and MR images for planning and virtual simulation, conventional simulation films, brachytherapy source localization films, and treatment portal images. Each will be discussed below.

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- Portal images are taken using the radiotherapy linear accelerator, with the patient in the treatment position. They are characterized by poor contrast as illustrated in Figure 7. While the anatomy is not clearly demonstrated, usually enough can be seen to enable a comparison with simulator images to confirm that the patient is being treated correctly.c 0 Tw -3035 0 3.5 TD -0 0 Tw 5414.25 TI

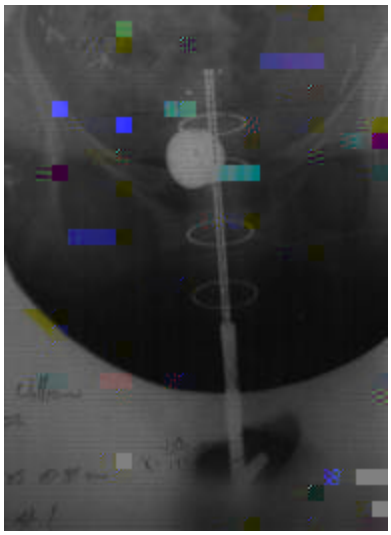

Figure 9: A localization film showing a vaginal cylinder in place, to bl Ad in calculating the dose distribution. This image was taken ing a conventional simulator, and shows the magnification markings.

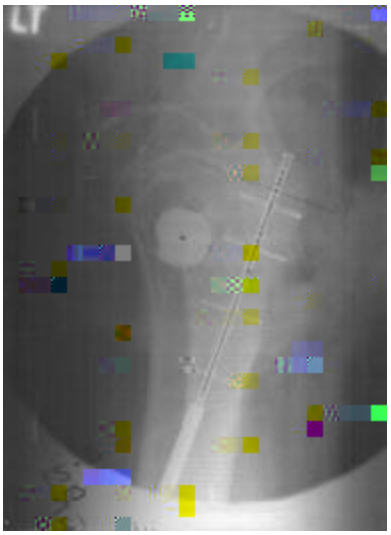

Figure 10: A fluoroscopic image of a vaginal cylinder. No magnification markings are visible, which would make it difficult to perform calculations with this image.

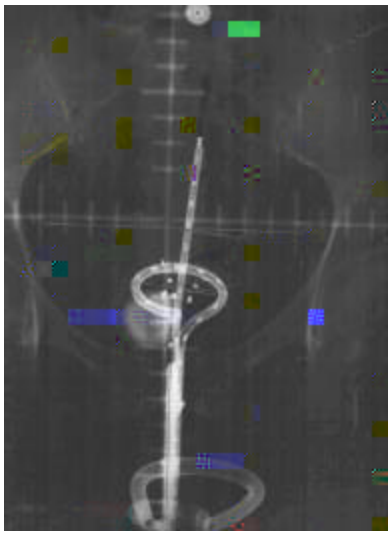

Figure 11: A loca tandem and ring applicator of a type that is sometimes used with a high-dose ra

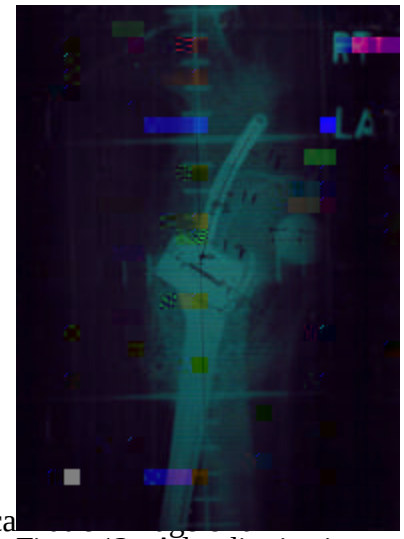

Figure 12: A localization image of a tandem and ovoid applicator, as is often used with conventional low-dose rate (LDR) brachytherapy sources

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(HDR) remote brachytherapy afterloading device.34 his image was

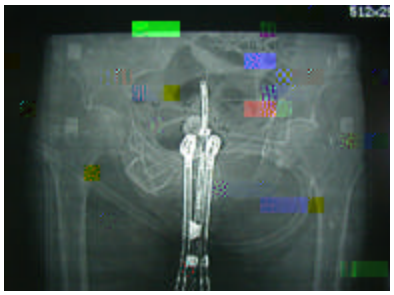

Figure 13: A digitally-reconstructed radiograph of a patient with a brachytherapy applicator in place. The scale of the image is not easily determined from this image, but can be displayed electronically.

IF YOU ARE CONTACTED BY THE RPC:

It is because we are missing data that are necessary to confirm the dose to your patient. If you believe you have a