

# Chapters 20 & 21 Radiology & Oncology

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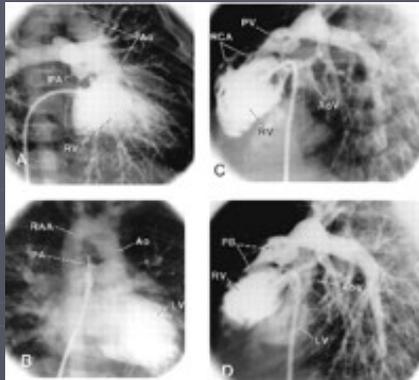
MI Program

MI 120

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## Angiocardiography

- ▶ Circulatory system to the heart



**AKA: Cardiac Catheterization**

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# Angiography

► Internal structures



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# Arteriography

► Arteries



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# Arthrography



Arthrogram of a hip

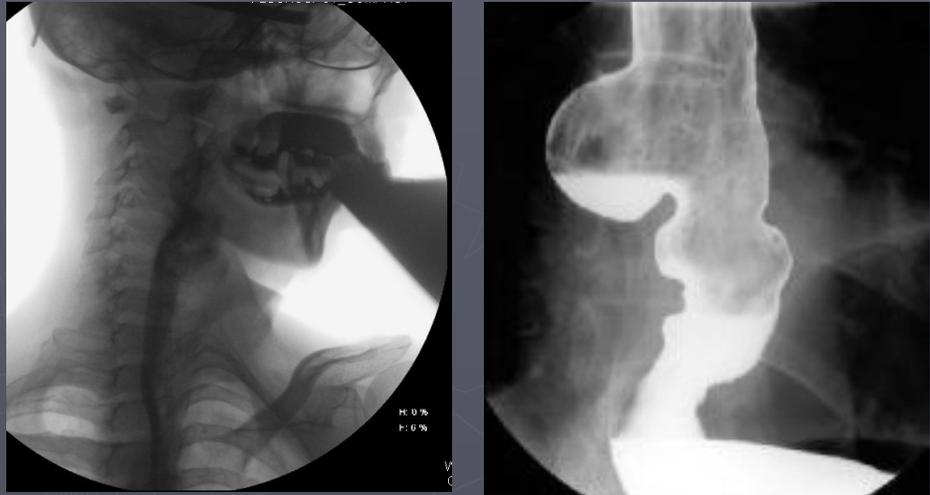
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# Barium Enema

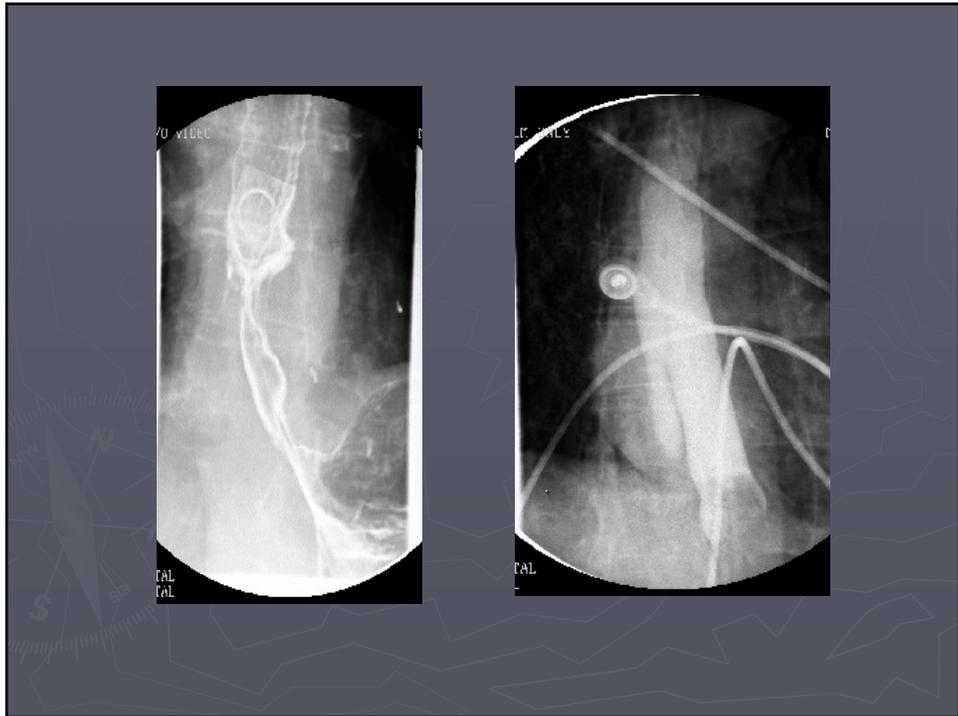


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# Barium swallow



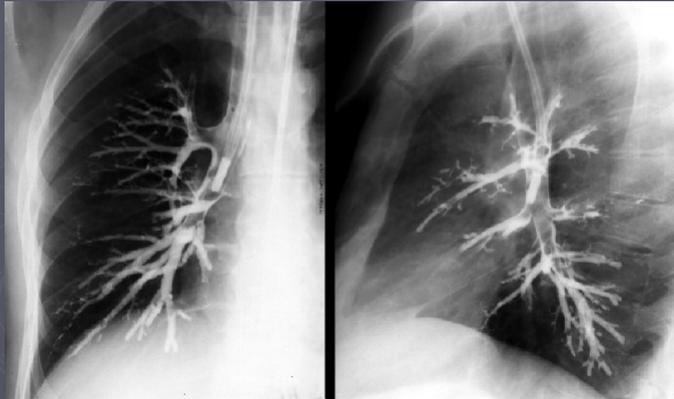
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# Bronchography

- ▶ Larynx, trachea, & bronchi



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# Cholangiography (intravenous)

- ▶ Bile ducts



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# Cholangiopancreatography

- ▶ ERCP
- ▶ Pancreatic ducts
- ▶ Biliary ducts

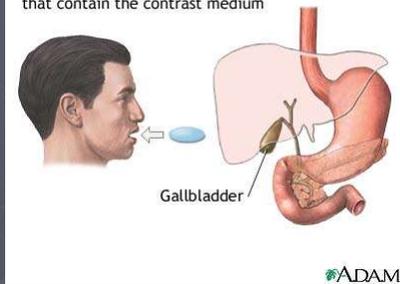


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# Cholecystography

- ▶ Gall bladder

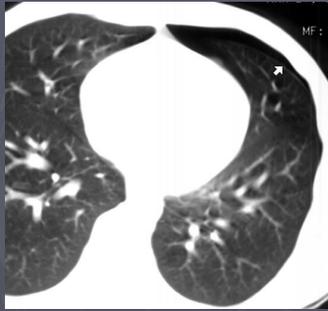
6 tablets (1 at a time) are swallowed that contain the contrast medium



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# Computed Axial Tomography

- ▶ CT or CAT
- ▶ Cross sectional



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# Voiding Cystourethrography

- ▶ Bladder and urethra



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# Digital Subtraction Angiography

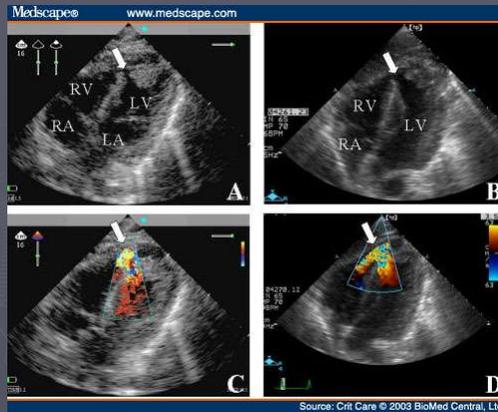
## ► Blood vessels



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# Echocardiography

## ► Structures and motion of the heart



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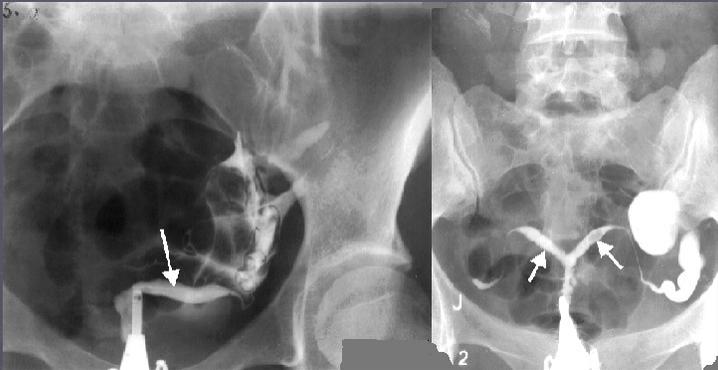
# Fluoroscopy



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# Hysterosalpingography

► Uterus and fallopian tubes



bicornuate

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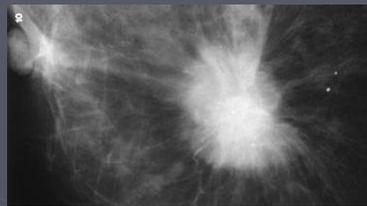
# Magnetic Resonance Imaging

► Fluid, soft tissue and bony structures



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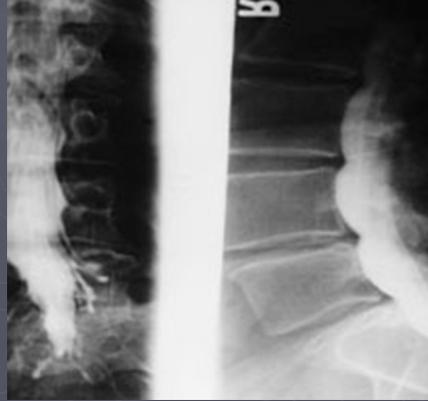
# Mammography



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# Myelography

- ▶ Spinal cord & vertebral canal



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# Positron Emission Tomography

- ▶ Biologic function of body before anatomical change



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## Pyelography (intravenous)

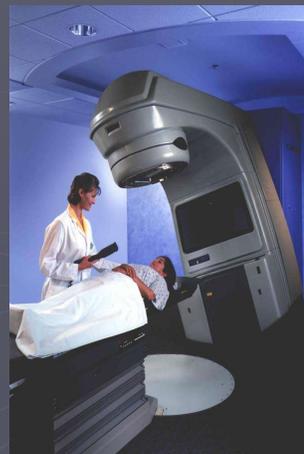
- ▶ IVP or IVU (urography)
- ▶ Urinary tract



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## Radiation Therapy

- ▶ Destroy or reduce tumor
- ▶ Decrease pain
- ▶ Relief obstruction
- ▶ Slow or stop cancer



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# Radioactive Iodine Uptake

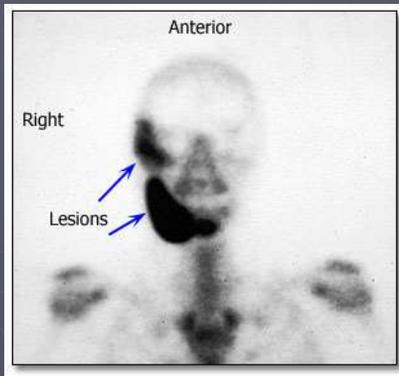
- ▶ thyroid



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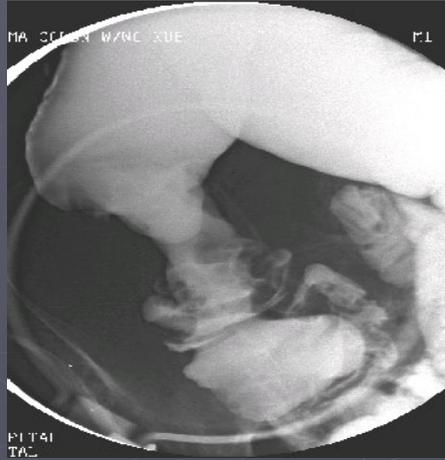
# Scanning

- ▶ Bone, brain, liver, lungs
- ▶ radionuclides



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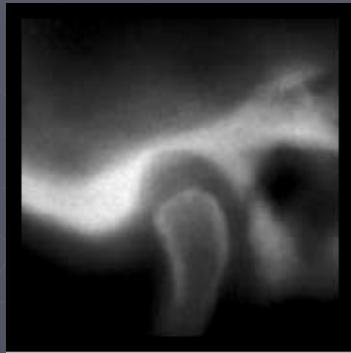
# Small Bowel Follow Through



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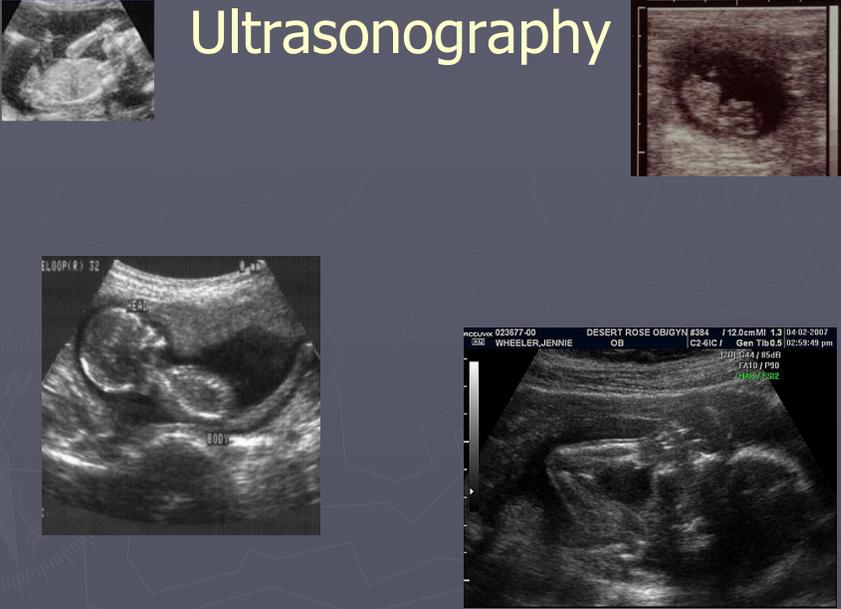
# Tomography

- ▶ X-ray that allows cross section



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# Ultrasonography

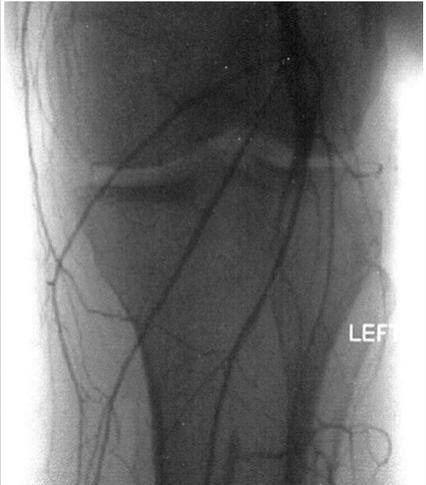


The slide features four ultrasound images. The top-left image shows a fetal profile. The top-right image shows a circular structure, possibly a fetal head in cross-section. The bottom-left image is a longitudinal view of a fetus with labels 'HEAD' and 'BODY'. The bottom-right image is a longitudinal view of a fetus with technical data at the top: 'DESCRIPTOR 022877.00', 'PATIENT WHEELER, JENNIE', 'DESERT ROSE OB/GYN #334', '12.9cm MI 1.3', '04.02.2007', 'OB', '2.6IC / Gen Tib 0.5', '02:58:49 pm', '120154 / 85dB', 'FATD / P30', and '120154'. A compass rose is visible in the bottom-left corner of the slide.

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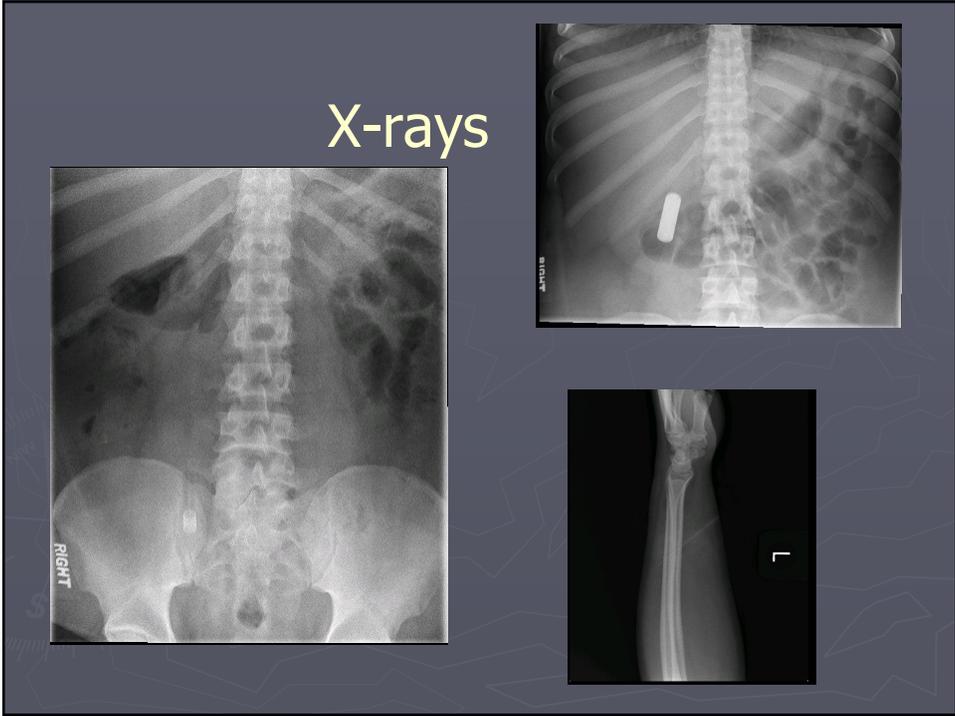
# Venography

► Veins



The slide displays a venogram of the left leg, showing a network of veins. The word 'LEFT' is printed in the lower right corner of the image. A compass rose is visible in the bottom-left corner of the slide.

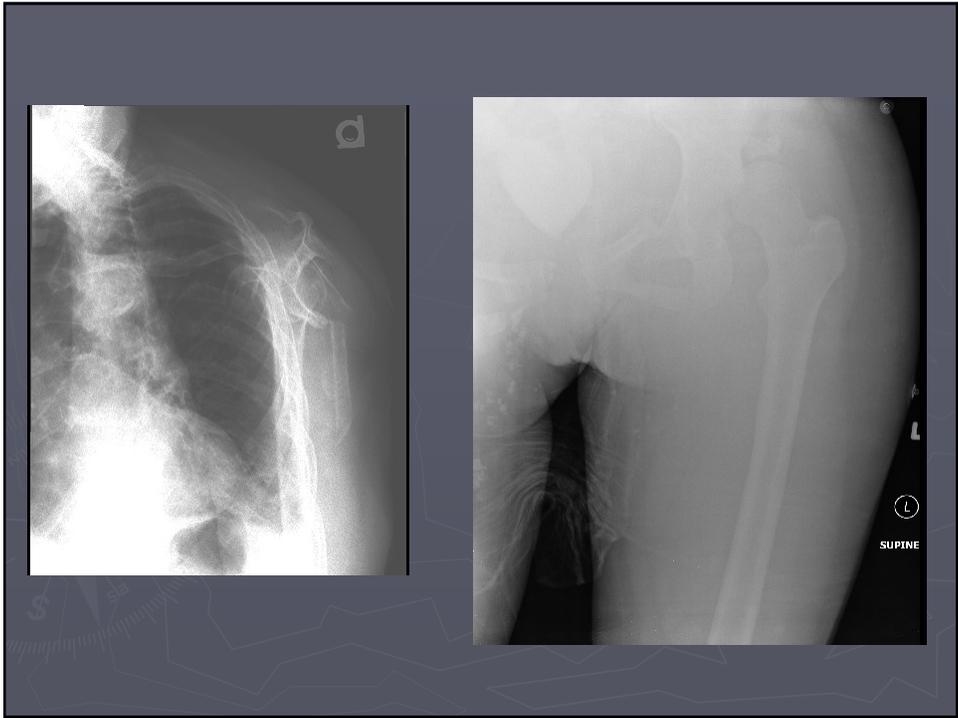
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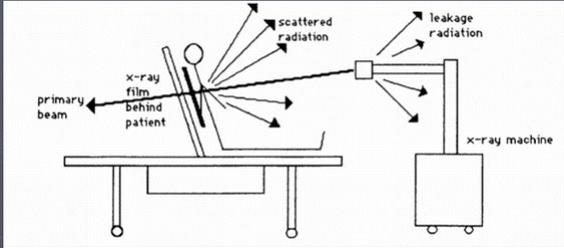


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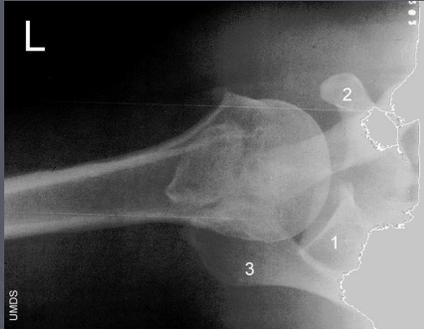
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# Anteroposterior



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# Axial



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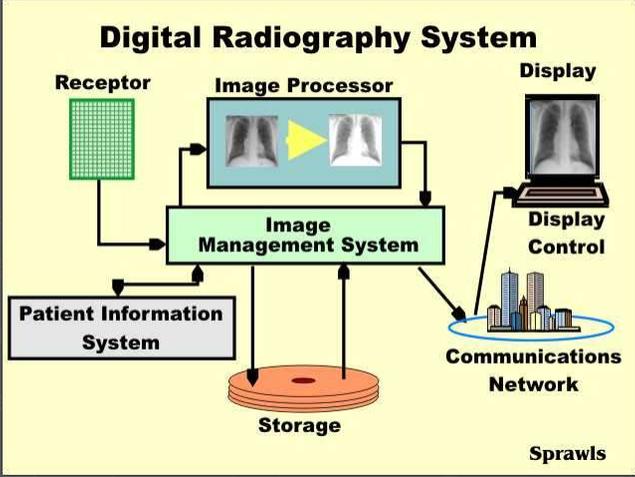
# Brachytherapy

- ▶ Placing radioactive seeds into tissue



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# Digital Radiography



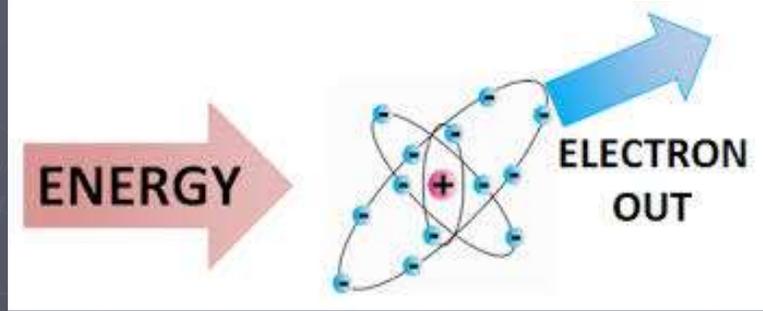
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# Gamma Camera



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# Ionization



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# Nuclear Medicine



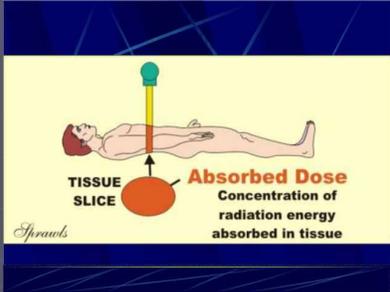
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# Posteroanterior



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# rad



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# Radiographer



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# Radioisotope



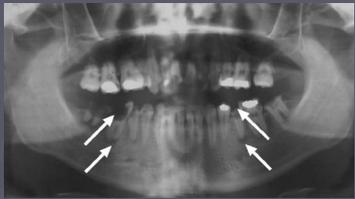
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# Radiologist

 Margeri Datzakis, M.D.	 Abin Bandyopadhyay, M.D.	 Joseph Burke, M.D.	 Gregory Chandra, M.D.	 Dawn Lewis, M.D.	 John Moore, M.D.	 Michelle Ojima, M.D.	 Derek O'Dell, M.D.
 Young Chong, M.D.	 Jeffrey Coranick, M.D.	 Lucas DeJohn, M.D.	 Edward Fallon, M.D.	 Michael Ramos, D.O.	 Michael Szwedka, M.D.	 James Tang, M.D.	 Jeffrey Tsai, M.D.
 Michael Feigliner, M.D.	 Tong Ge, M.D.	 Michael Gert, M.D.	 Richard Goggin, M.D.	 Brett Wagner, M.D.			
 Thomas Hensel, MD, PhD	 Jennifer Jung, M.D.	 Michael Kowalsky, M.D.	 Jennifer Nagel, M.D.				

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# Radiolucent

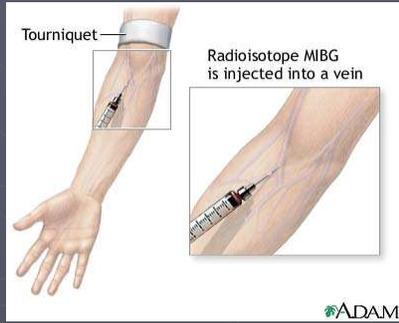




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# Radionuclide (radioisotope)

- ▶ Isotope that undergoes decay



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# Radiopaque



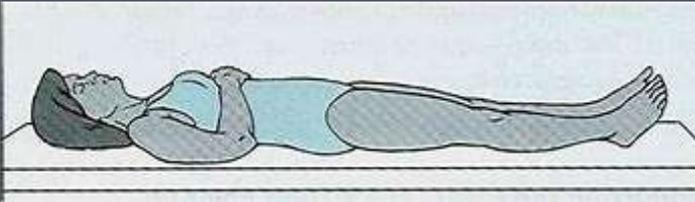
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# Radiopharmaceutical



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# recumbent



**Right Lateral Recumbent**



**Left Lateral Recumbent**

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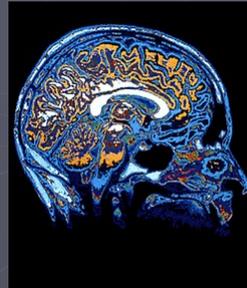
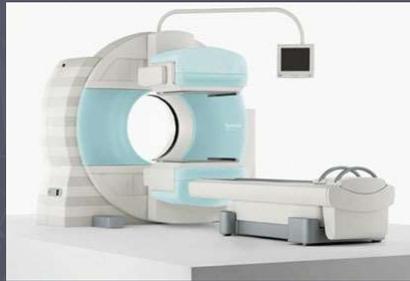
# Roentgenology



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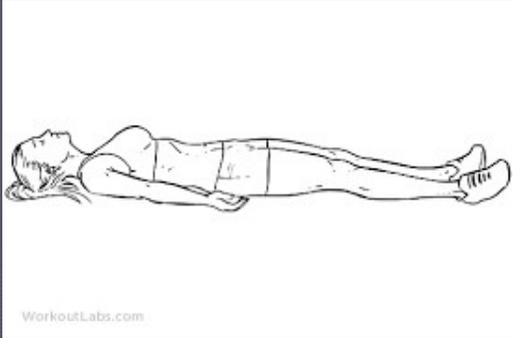
# Single Photon Emission Computed Tomography

- ▶ Variation of CT that uses gamma camera



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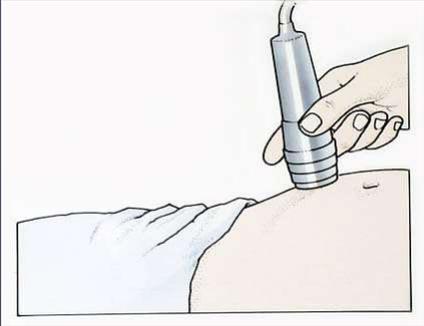
# supine



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# Transducer

► Used in Ultrasound



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# Word Elements

- ▶ Angi/o
- ▶ Anter/o
- ▶ Arthr/o
- ▶ Arteri/o
- ▶ Bronch/o
- ▶ Cardi/o
- ▶ Fluor/o
- ▶ Radi/o
- ▶ Son/o
- ▶ Tel/e
- ▶ Tom/o

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# Common Abbreviations

- ▶ AP
- ▶ Ba
- ▶ BE
- ▶ CAT
- ▶ C-spine
- ▶ CT
- ▶ CXR
- ▶ ERCP
- ▶ Fx
- ▶ IVU
- ▶ KUB
- ▶ MRA
- ▶ MRI
- ▶ PA
- ▶ PET
- ▶ rad
- ▶ SBS
- ▶ UGI
- ▶ u/s

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# Benign



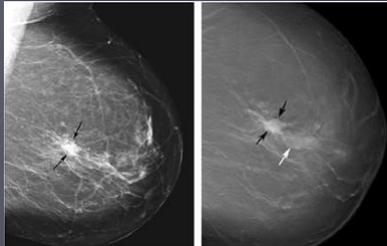
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# Carcinoma



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# Carcinoma in Situ



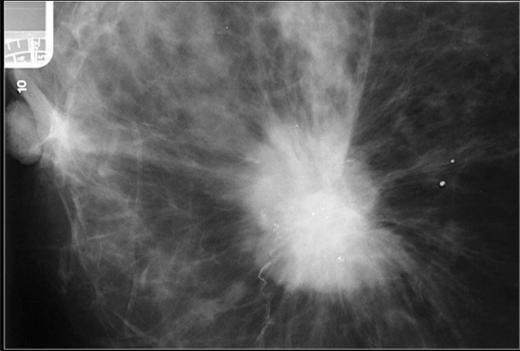
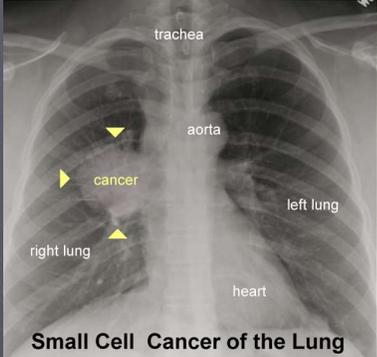
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# Chemotherapy



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# Invasive



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# Malignant



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# Oncologist



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# Radiotherapy



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# Remission



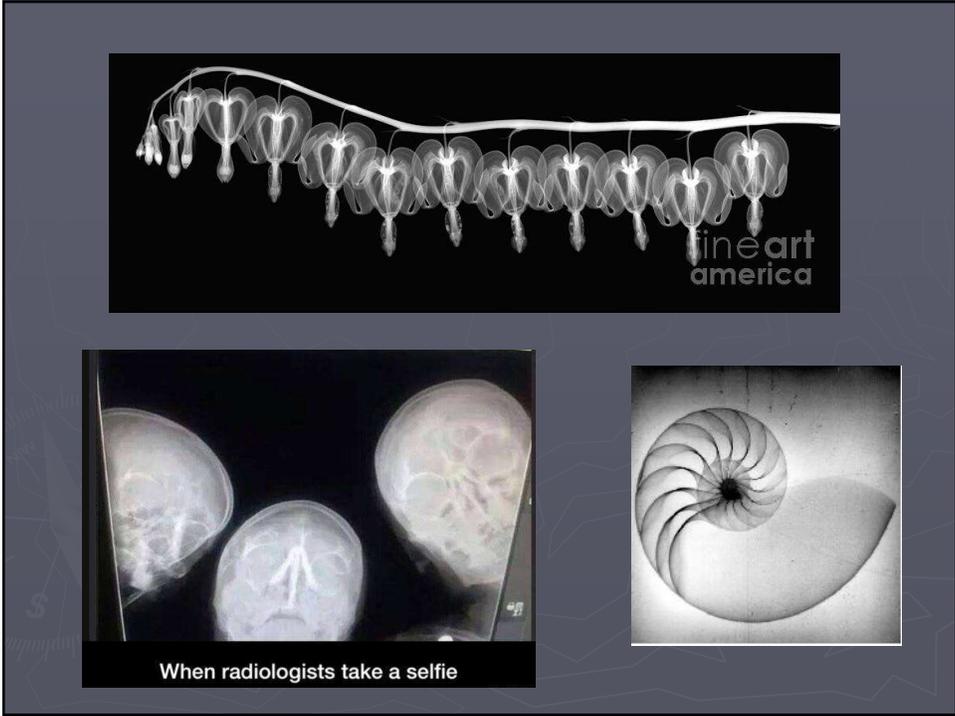
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# Abbreviations

- ▶ ACS
- ▶ mets



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