

Sciascopy

Sciascopy is a diagnostic and interventional radiological method that uses dynamic imaging of an X-ray (<https://www.wikilectures.eu/w/X-rays>) image (e.g. for imaging peristalsis of the esophagus, stomach, intestines, observation of respiratory movements or heart pulsation). To reduce the radiation load, a pulse mode is used, where the image is created e.g. **4 times** per second (not continuously) and low **mAs** values with automatic kVp power control (https://en.wikipedia.org/wiki/Electric_energy_consumption) .

Examination Types

Monocontrast – Use of only positive contrast material (this method is mainly used in children).

Double- contrast – Use of positive and negative contrast material.

For women of childbearing age, the effort is to follow the so-called 10-day rule. The examination is performed during the first 10 days of the menstrual cycle, when higher doses of radiation are applied to the abdominal area.

Types of Contrast Agents

Negative - air (irrigography), methylcellulose (enteroclysis).

Positive - barium suspension, iodine contrast agents.

Methods in Sciascopy

The fluoroscopy methods include:

- **X-ray examination of the digestive tract:** X-ray of the esophagus , videofluoroscopy , X- ray of the stomach , X- ray passage , enteroclysis , irrigography , defecography , introduction of stents under X-ray control .
- **Urinary tract examination and intervention:** ureterocystography , insertion of a pig-tail catheter .
- **Fistulography:** injecting the mouth fistula or drain with a contrast agent .
- **Diaphragm sciascopy:** diagnosis of diaphragmatic paresis .
- **Sciascopy of the lungs:** differentiation of a nodule in the lung parenchyma from extraparenchymal lesions or summations.
- **Cholangiography:** intraoperative, T-drain (<https://www.wikilectures.eu/w/Drainage>) , PTC (percutaneous transhepatic cholangiography) , ERCP (https://www.wikilectures.eu/w/Endoscopic_retrograde_cholangiopancreatography) .

X-ray of the esophagus: tumorous stenosis (<http://atlas.mudr.org/Case-images-Tumorous-stenosis-of-oesophagus-1030>)

T-drain cholangiography: choledocholithiasis (<http://atlas.mudr.org/Case-images-Cholangiography-T-drain-choledocholithiasis-691>)

Links

- Radiodiagnostics portal (<https://www.wikilectures.eu/w/Portal:Radiology>)

Resources

- Principle of skiagraphy, fluoroscopy, CT and angiography (Lucie Dohnalová, MD, Brno University Hospital) (http://is.muni.cz/el/1451/jaro2012/bp1193/32522183/Princip_skiagrafie__skioskopie__CT_a_angiografie.pdf%7C)

Related Articles

- Diagnostic imaging methods in the examination of the digestive tract (https://www.wikilectures.eu/w/Examination_methods_in_gastroenterology)
- Diagnostic imaging methods in the examination of the gallbladder and bile ducts (https://www.wikilectures.eu/w/Diagnostic_imaging_methods_in_the_examination_of_the_gallbladder_and_bile_ducts)
- Radiodiagnostic examination of the urinary tract (https://www.wikilectures.eu/w/Radiodiagnostic_examination_of_the_urinary_tract)
- X-ray (physics) (<https://www.wikilectures.eu/w/X-Ray>)

External links

- Images at atlas.mudr.org (<http://atlas.mudr.org/Imaging-images-by-modality-RF-Fluoroscopy-17>)
- ŠPRINDRICH, Jan. *Rtg dynamické metody a kontrastní látky* [online]. Multimedia support for the teaching of clinical and medical fields :: Portal of the 3rd Faculty of Medicine of the UK, ©6.3.2011. Last revision 16.3.2011, [cit. 2011-12-22]. ISSN 1804-3143. < <http://portal.lf3.cuni.cz/clanky.php?aid=85> >.
- Skiaskopia (Slovak Wikipedia) (<https://sk.wikipedia.org/wiki/Skiaskopia%7C>)
- The principle of skiagraphy, sciascopy, CT and angiography (MUDr. Lucie Dohnalová, Fakultní nemocnice Brno) - Page 22 (https://is.muni.cz/el/1451/jaro2012/bp1193/32522183/Princip_skiagrafie__skiaskopie__CT_a_angiografie.pdf%7C)