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Title of the presentation: **Lymphangiography in a case of Chyluria, A case report**

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Introduction/ Review of Literature:

- Lymphangiography is a method to visualise lymphatic channels.
- Radio-opaque contrast materials are injected and visualised under x-ray, fluoroscopy, computed tomogram or MR imaging.
- Lymphangiography as a method was initially introduced in early 1950s, however with advent of newer imaging techniques, it became obsolete.
- Intra-nodal lymphangiography as a method was popularised in 2011-12.
- Here we present a case of 28 year lady presented to medicine OPD for white coloured urine for 1 month.

Aims/ Objectives:

- To visualise the lymphatic channels and to identify extra-lymphatic communications, which can be used for diagnostic and therapeutic purposes.

- During 1998 Dr. Constantine Cope, an interventional radiologist, explained how pedal lymphangiography could be used to carry out thoracic duct embolization.

- Transvenous retrograde, transhepatic, and mesenteric, percutaneous direct retrograde lymphangiography described were introduced later on.

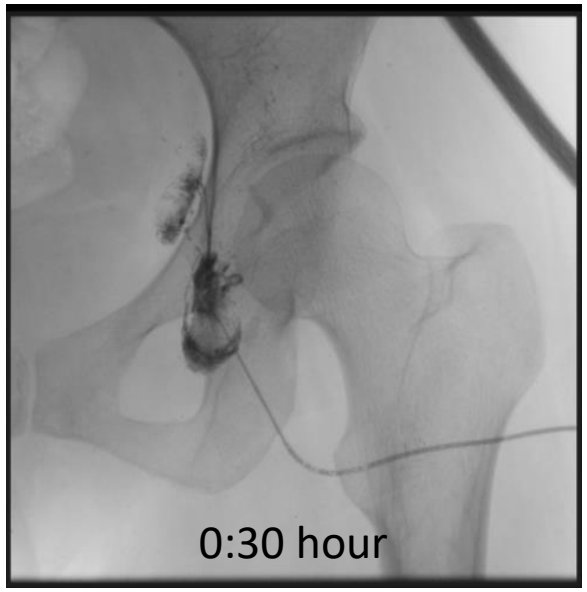
Methodology:

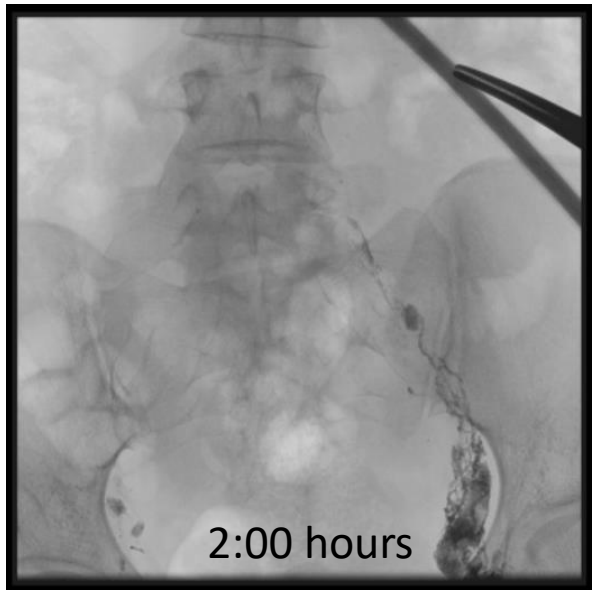
- Written informed consent was taken from patient.
- Under the guidance of liner ultrasound transducer, bilateral inguinal lymph nodes were cannulated using 22G metallic vein set.
- Initially 1ml ethiodized oil was injected into them then 0.5ml after every 5 minutes till total of 4ml on either side.
- Dynamic study under fluoroscopy were performed during contrast administration.
- Serial spot radiographs were taken afterwards at intervals of 30 minutes.

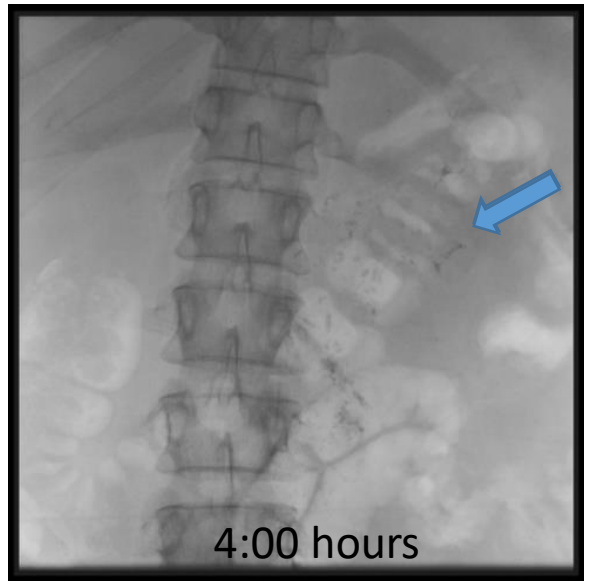
Results:

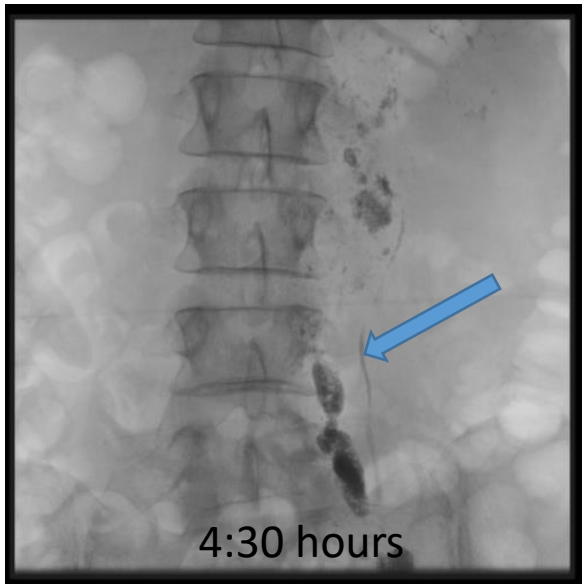
- Contrast initially ascended through nodal channels.
- Lymphatic vessels were opacified after 2 hours.
- After 4 hours, contrast accumulated in left peri-hilar region.
- At 4 hour 30 minutes, contrast was seen in to tubular structures, which on fluoroscopy showed caudal movement.
- Patient then had an urge to urinate after which those opacified tubular structures became inapparent.

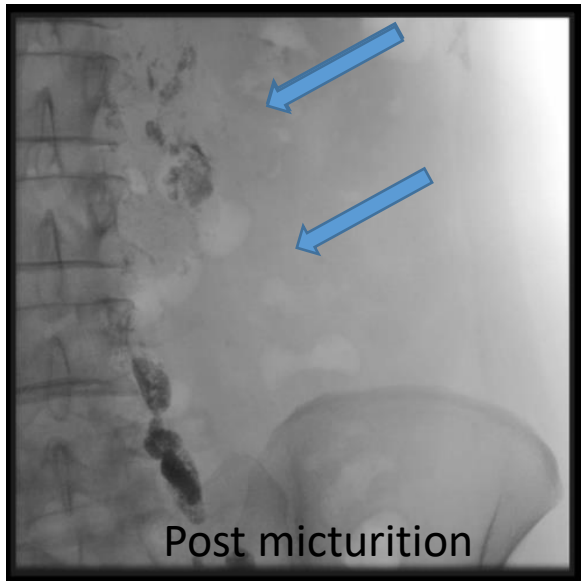
Representative images:











Conclusion:

- Intra-nodal lymphangiography revealed communication of lymphatic channels with left hilar lymphatic channels.
- The contrast was likely moving caudally with ureteric peristalsis and was eliminated after urination.
- Hence, the diagnosis of chyle leak at left hilar lymphatic channels secondary to genito-urinary tuberculosis was made.
- Genito-urinary tuberculosis comprises of 20% of extra-pulmonary disease in India.Association of chyluria with genito-urinary tuberculosis is a very rare phenomenon in a common disease.
- Invasive lymphangiography still remains as an important tool to diagnose as well as treat such cases.

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