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Maseeh-uz-Zaman, Riffat Parveen Hussain, Khalil Ahmed Khan, Gufran Khan and M. Nadeem Ahmad

ABSTRACT
Chyluria is an abnormal condition in which chyle appears in the urine because of a fistulous communication between the lymphatics and the urinary tract. It is not life-threatening and spontaneous regression is reported in 50% of cases. Lymphangiography has been the main imaging modality for localization of the site of fistula, but it is invasive and requires expertise. Lymphoscintigraphy using Tc-99m labelled colloid is a safe, non-invasive, reproducible technique, which bears less radiation exposure. A 67-year-old male presented with 7-month history of chyluria following a spinal surgery. Bilateral lower limb lymphoscintigram revealed sluggish lymph flow in the left lower limb and visualization of tracer in the left kidney consistent with lymphorenal fistula. Subsequent cystography revealed appearance of chylous urine from left ureter. Patient refused surgery.

Key words: Chyluria. Lymphoscintigraphy. Lymphorenal fistula.

CASE REPORT
We are reporting a case of chyluria developed after spinal surgery in which lymphoscintigraphy was used to localise the lymphorenal fistula as the cause of chyluria.

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denied any specific pharmacological or surgical treatment.

**DISCUSSION**

Collateral lymphatic circulation is an important clinical pathophysiological phenomenon which signifies an obstructed lymph outflow and depends on location of the obstruction and on developmental anatomy of the lymphatic system. Chyluria is an abnormal condition in which chyle appears in the urine because of a fistulous communication between the lymphatics and the urinary tract. Although, the most common cause is parasitic with infestation by Wuchereria bancrofti, non-parasitic chyluria may arise due to thoracic duct stricture or direct injury to the kidney with formation of lymphatic-urinary fistulas. Obstruction of the larger lymphatic vessels may be caused by trauma, tuberculosis, abscess, or neoplasms, such as malignant lymphoma. Other infrequent causes include lymphangieteacy, pelvic lipomatosis, and compression of the thoracic duct by a pseudoaneurysm of the thoracic aorta, or even pregnancy. It is not life-threatening and in 50% spontaneous regression is reported. Other methods of treatment are sclerotherapy, somatostatin therapy and surgery. The main goal for the surgeon is to recognize pre-operatively not only lymphatic obstruction, but also existing lymphatic collateral pathways, and try to preserve them. Lymphangiography has been the main imaging modality but it is invasive and requires expertise for cannulation and significant radiation exposure. But in recent years, radionuclide lymphangiogram of both lower limbs has essentially replaced the lymphangiography. Like in this case report, abnormal tract was visualized indirectly due to appearance of radiotracer in the left kidney and subsequent cystoscopy revealed appearance of chylous urine from the left ureteric orifice. Therefore, lymphoscintigraphy using Tc-99m labelled colloid is a safe, non-invasive and reproducible technique and bears less radiation exposure.

**REFERENCES**