VIDEO SECTION

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Indocyanine green – guided laparoscopic renal pedicle lymphatic disconnection: A novel, targeted treatment for chyluria

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ABSTRACT

Introduction and Objectives: Chyluria, or the passage of chyle into the urine from anomalous lymphatic connections, results in a characteristic milky urine. In severe cases, it can cause significant morbidity from nutritional losses and immune suppression. Although predominantly associated with *Wuchereria bancrofti* infections, non-parasitic cases have also been described.

Traditionally, surgical treatment has involved renal lymphatic disconnection using open or minimally invasive methods, occasionally aided by pre-operative imaging techniques like lymphangiography, or by identification of structures with laparoscopic magnification.

Materials and Methods: Here we describe a novel technique of targeted renal pelvis lympholysis using retrograde intra-ureteric Indocyanine Green (ICG) administration to accurately identify and ligate the anomalous lymphatics.

Results: ICG-guided renal pelvis lympholysis was successfully performed in a single patient, who was discharged well on post-operative day 4 and remained symptom-free at 6-month follow-up.

Conclusion: The use of intra-ureteric ICG is a new technique which allows for precise, intra-operative identification and ligation of anomalous lymphatics in chyluria, with sustainable results. Complete skeletisation of the renal hilum could be avoided, reducing procedure time and decreasing the risk of injuring hilar structures. This novel technique should be considered as a valuable addition to the urologist's arsenal.

CONFLICT OF INTEREST

None declared.

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