



Is Renal Scintigraphy Useful for Detecting Early Ureteric Stricture 3 Months After Ureteroscopic Lithotripsy (URSL)?

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Objective:

To determine whether nuclear renal scan can be used to guide early treatment of post URSL ureteric stricture.

Patients & Methods:

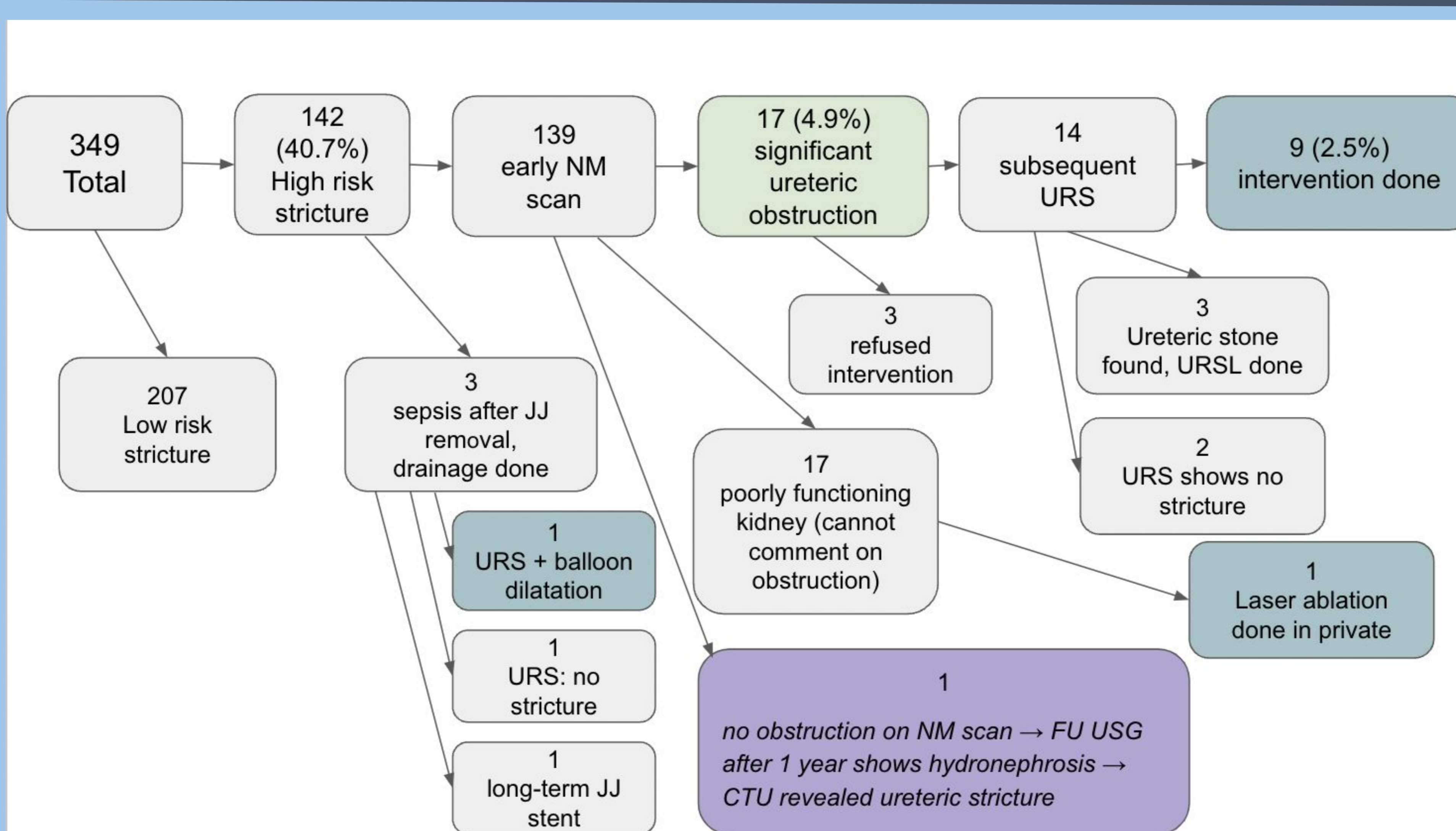
Patients who underwent URSL between 2021 and 2023 at Queen Elizabeth Hospital were retrospectively reviewed. Patients were stratified into high-risk or low-risk stricture groups based on intraoperative findings. An early dynamic nuclear renal scan (MAG3/DTPA scan) was performed 3 months after URSL, 2 weeks after double-J stent removal to assess whether there was any ureteric obstruction. Patients' symptoms, renal function, and subsequent related surgical interventions were reviewed.

Results:

A total of 349 URSL procedures were performed at Queen Elizabeth Hospital between 2021 and 2023. Of these, 142 (40.7%) patients were deemed high risk for stricture, and 139 patients had an early MAG3 scan done. The renal scan showed significant obstruction in 17 (4.9%) patients, of which 9 (2.5%) patients were confirmed to have ureteric stricture requiring subsequent intervention including laser endoureterotomy (3), balloon dilation (5) and stricture excision with ureteroureterostomy in private (1).

All of these patients had static renal function after intervention.

Up to post-operative 1 year follow up, ureteric stricture occurred in 12 (3.4%) patients, in which 9 (75%) patients had ureteric stricture detected by the 3-month MAG3 scan.



Conclusion:

URSL is a safe procedure with a low post-op ureteric stricture rate. Dynamic renal scan is a safe and useful tool in the early detection of post-URSL ureteric stricture.