

Primary Non-Refluxing Congenital Megaureter: Does Ureter Diameter Really Matter?

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AIM

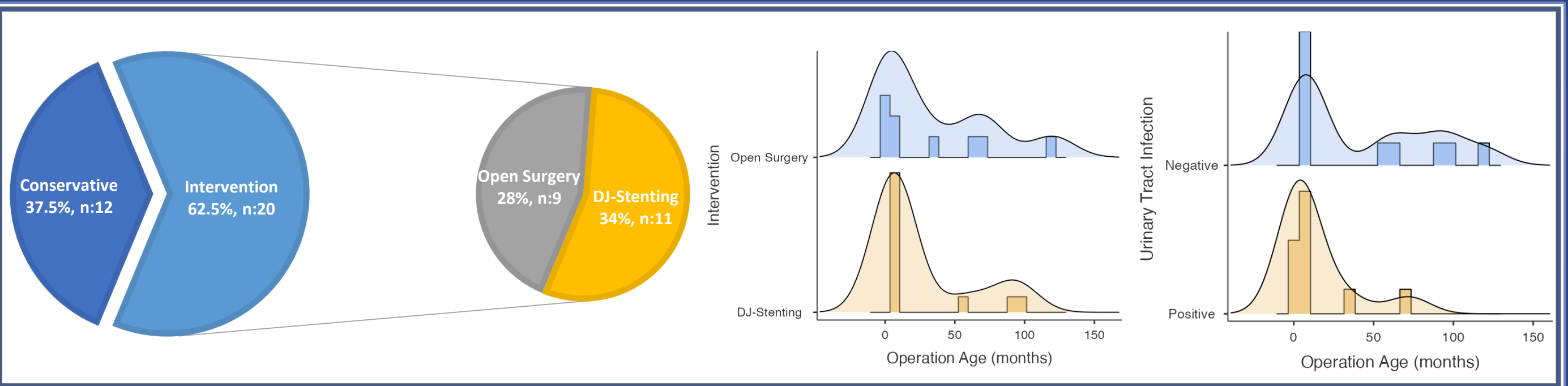
- ❖ Ureter diameter exceeding 6mm is termed megaureter.
- ❖ This study aimed to evaluate the clinical features of primary non-refluxing megaureter and importance of ureteral diameter in the management.

METHODS

- ❖ Clinical, radiological, operative findings and long-term outcomes of congenital megaureters followed or operated in between 2011-2023 were evaluated, retrospectively.
- ❖ Patients with;
 - ✘ Vesicoureteral reflux (VUR),
 - ✘ History of disease or surgery could affect lower urinary tract functions,
 - ✘ Follow-up-duration less than one year were excluded.

RESULTS

- ❖ Among 32 patients, 12.5% (n:4) were female and 87.5% (n:28) male.
- ❖ Prenatal diagnosis was made in 50%.
- ❖ The median age at presentation was 9 months (Range:1-108, IQR:2-85.8) for those without prenatal diagnosis.
- ❖ Twenty-six patients had unilateral (Right n:7, Left n:19), 6 had bilateral megaureter.
- ❖ Voiding cystourethrography revealed contralateral VUR in 2 patients.
- ❖ During a mean follow-up period of 94.3±53.4 months, 37.5% (n:12) were managed conservatively, 62.5% (n:20) required intervention.



- ❖ The median operation age was 8 months (Range:1-120, IQR:1-66) for open surgery and 7.5 months (Range:4-96, IQR:5-22) for double-J-stenting ($p>0.05$).
- ❖ The median operation age of the patients who had UTI was found to be significantly younger than others ($p:0.007$).
4.5 months (Range:1-72, IQR:1.7-7.5) vs. 10 months (Range:5-120, IQR:7.5-78)

- ❖ Ureter diameter;
 - 10.4 mm (Range:6.2-24.2, IQR:9-12.4) → 6.9 mm (Range:0-17, IQR:0-12) in conservatively managed cases,
 - 11 mm (Range:8-24.2, IQR:10.4-13.8) → 9 mm (Range:0-19, IQR:2.63-14) in double-J-stent group,
 - 9.7 mm (Range:6.2-18.8, IQR:8-11) → 4.3mm (Range:0-13, IQR:0-10) in the open surgery group.
 - No significant difference was observed between the groups in terms of initial and final ureteral diameters ($p>0.05$).

TABLE I	Median	Range	IQR
The peak measured ureter diameters in the conservatively managed group	12 mm	9-33	9.97-17
Preoperative ureter diameters in double-J-stent group	12.5 mm	8.8-17	12-14
Preoperative ureter diameters in open surgery group	14 mm	8-31	10-16

- ❖ No significant difference was observed between;
 - The peak measured ureter diameters in the conservatively managed group,
 - Preoperative ureter diameters in double-J-stent group,
 - Preoperative ureter diameters in open surgery group ($p>0.05$).

CONCLUSION

- ❖ Ureteral diameter has limited importance in the management of primary non-refluxing congenital megaureter.
 - ❖ Conservative management may be an option even in advanced dilatations.
 - ❖ Postoperative ureteral dilatation may persist at varying levels and durations.