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Intramuscular Ketorolac Administered at Time of Stent Removal Decreases Pain-related Return Visits in a Randomized Control Trial

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DISCLOSURES

- None

AIM AND METHODS

- Aim: To determine whether intramuscular ketorolac at time of stent removal reduced pain or pain-related sequelae associated with stent removal.
- **Prospective randomized double-blind controlled trial**
- Patients were randomized to receive either 30mg in 1mL of ketorolac (treatment) or 1mL injection of 0.9% normal saline (placebo) immediately prior to office stent removal
- Outcomes:
  - Pain score at 1 and 7 days following stent removal
  - Narcotic Use following stent removal
  - Unplanned return to ED or Urology Clinic

RESULTS

	Group	Control Group (n=62)	Treatment Group (n = 62)	p-value
Pain Endpoints	Mean VAS 24 hours	2.7	2.4	NS
	% pts with VAS ≥ 7 at 24 hours	14%	17%	NS
	Subjective renal colic	16%	10%	NS
	Narcotic use at 24 hours	27%	26%	NS
	Mean Vas 7 Days	0.5	0.9	NS
	% pts with VAS ≥ 7 at 7 Days	2%	3%	NS
	Mean days missed work (if working)	3.2	3.8	NS
Injection Safety	Injection site reaction	0%	0%	NS
	Injection site pain	2%	2%	NS
	Injection complication	0%	0%	NS
Unplanned Return Encounter	**Return to clinic or ED**	**8/62 (13%)**	**1/62 (2%)**	**0.032**

VAS: Visual Analog Pain Scale (0 – 10)
ED: Emergency Department

CONCLUSION

While having no impact on subjective pain, intramuscular injection of ketorolac at the time of stent removal **significantly decreases renal colic-related returns to the ED or Urology Clinic**.

For patients eligible to receive ketorolac, clinicians should consider its administration at the time of stent removal.

Thank you