Abstract:

Introduction: Bumetanide can induce generalized musculoskeletal pain when administered as a continuous infusion, an effect that may be underrecognized. The purpose of this case series is to educate health care providers about the incidence and presentation of pain associated with bumetanide infusions, adding to the existing literature describing this adverse event.

Clinical findings: Of 40 critically ill patients, 15 (38%) had increased pain scores after initiation of a continuous infusion of bumetanide, with symptoms commonly occurring 12 to 24 hours after initiation of the infusion. Reported descriptions of the pain included generalized aching, soreness, burning, allodynia, headaches, and exacerbation of underlying pain in localized areas. Increases in patient-reported pain correlated directly with initiation of the continuous infusion of bumetanide.

Diagnosis: Four of the 15 bumetanide-associated pain events (27%) were recognized as such by the health care team.

Interventions: Bumetanide was promptly discontinued in the 4 identified cases. The 11 patients (73%) whose pain was not recognized as related to bumetanide remained on a continuous infusion of bumetanide and received pain medications including opioids. Infusions were stopped when patients transitioned to dialysis (n = 8 [53%]), began receiving comfort care (n = 5 [33%]), or completed diuresis therapy (n = 2 [13%]).

Outcomes: For all patients, pain symptoms resolved within 24 to 48 hours after discontinuation of bumetanide infusion with no significant electrolyte abnormalities.

Conclusion: Bumetanide-induced pain is more common than previously described. Early recognition of this adverse event can prevent patient discomfort and escalation of treatment.

Reference:

Herges LB, Jentzer JC, Brighton DD, Herges JR, Ou NN. Pain Associated With Continuous Intravenous Infusion of Bumetanide: A Case Series. Crit Care Nurse. 2021 Apr 1;41(2):44-50. doi: 10.4037/ccn2021833. PMID: 33791769.