

T-5

Can NK1 antagonists and COX-2 inhibitors improve same-day discharge rates following chemoembolization?

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BACKGROUND

Observation after 40% of chemoembolization procedures, which places a burden on patients and families and adds to institutional costs for care. Standard pre-medications include corticosteroids, diphenhydramine, a 5-HT3 antagonist such as ondansetron as well as intra- and post-operative narcotics for pain control. Recent NCCN and ASCO guidelines for highly emetogenic therapies add a neurokinin receptor antagonist (e.g., fosprepitant), but these drugs are expensive. Additionally, recent trials have shown that pre-medication with a COX-2 inhibitor reduces post-operative pain scores and narcotic requirements. We investigated whether adding IV fosprepitant and ketorolac as pre-medications for liver embolization would improve same-day discharge rates without increasing the rate of unscheduled return visits, and if the resultant savings would offset the drug cost.

METHODS

Patient variables included tumor burden, amount of liver embolized, embolization of the gallbladder, chemoembolic dose, and particle size. Outcomes included need for pre-discharge narcotics and anti-emetics, same-day discharge, and unscheduled return visits. Data were collected on patients treated since January 2023, with the new premedication regimen instituted in 2024.

RESULTS

294 chemoembolizations were performed from Jan 2023 to the present. To date, 44 procedures have been analyzed, 18 with the new pre-medication scheme. 29 were segmental and 15 were lobar chemoembolizations using 100-300 micron microspheres, almost all had tumor burden < 25%.

Prophylaxis	Standard	NK-1 + COX-2
N	26	18
Post-op narcotics	13 (50%)	6 (33%)
Post-op antiemetics	11 (46%)	5 (28%)
Same day discharge	16 (62%)	17 (94%)
7-day return	0	0

CONCLUSIONS

These preliminary data suggests that pre-medication with a NK1 antagonist and a COX-2 inhibitor reduces the severity of post-embolization syndrome and substantially increases same-day discharge rates. Analysis of the full cohort will provide robust statistical power and a cost comparison between the two strategies.

ABSTRACT ID 28645

