Loratadine for Paclitaxel-Induced Myalgias and Arthralgias

Caleb Smith, MD¹ Andrea Wahner Hendrickson, MD² Megan Grudem, CNP, APRN² Carolyn Klampe, CNP, APRN, MSN² Erin Deering, CNP, APRN² Aminah Jatoi, MD²
¹Department of Medicine, ²Department of Oncology
Mayo Clinic, Rochester, MN

INTRODUCTION

- Paclitaxel causes a pain syndrome characterized by diffuse myalgias and arthralgias in 70% of patients.
- Prior studies have resulted in negative or, at best, modest reports of palliation.
- The aim of this study was to evaluate if loratadine palliates this pain syndrome.

METHODS

- Medical records of postoperative ovarian and endometrial cancer patients seen between 1/1/2001 and 12/31/2017 were reviewed.
- Patients were included if they received both loratadine and paclitaxel.
- The first group consisted of patients who had received paclitaxel, developed arthralgias and myalgias, and then took loratadine.
- The second group consisted of patients who were already taking loratadine and then received paclitaxel.

RESULTS

- 862 patients received paclitaxel.
- 40 patients received concurrent loratadine. (See Figure 1)

Figure 1: Consort Diagram

Table 1: Demographics n=40 *

Demographic	Number of Patients
Age (range)	61 (41, 79)
Cancer Type	
Ovarian	27 (68)
Endometrial	13 (32)
Dose of paclitaxel	
>60 mg/m ²	34 (85)
<= 60mg/m ²	6 (15)
Multi-agent chemotherapy?	
Yes	39 (97)
No	1 (3)
Loratadine prior to symptom development?	
Yes	32 (80)
No	8 (20)

*Numbers in parenthesis denote percentage of entire group unless otherwise specified

Figure 2: Loratadine Given After Symptoms (n=8)

Of 8 patients who experienced paclitaxel-induced myalgias and arthralgias and then took loratadine, 6 (75%; 95% confidence interval: 35%, 97%) showed symptom improvement.

Table 2: Medical Record Comments After Loratadine

Favorable

“She did have muscle pain/bone pain approximately 36 hours after her last treatment...the pain was not as bad as previously”

“She feels that the joint pain was better”

“No...myalgias or arthralgias”

“She did experience some migrating generalized body aches and pains approximately 4 days through 6 days following chemotherapy...but this has resolved”

Unfavorable

“She reports feeling overall generally well... with the exception of... muscle aches.”

Figure 3: Loratadine Given Before Paclitaxel (n=32)

Of 32 patients already taking loratadine, only 11 developed paclitaxel induced myalgias and arthralgias (34%; 95% confidence interval: 19%, 53%).

DISCUSSION

- 75% of patients reported improvement of symptoms with loratadine.
- Only 34% taking loratadine developed paclitaxel-induced myalgias and arthralgias, in contrast to prior studies reporting rates around 70%.

CONCLUSIONS

- Loratadine appears to help patients who suffer from paclitaxel-induced myalgias and arthralgias.
- Further study is indicated.