

Analgesic Effects of Indomethacin Spray on Oral Mucositis in Patients Undergoing Chemotherapy



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Introduction

Severe, chemotherapeutically induced mucositis frequently reduces the patient's quality of life. We studied the analgesic effects of 0.25% indomethacin spray as an in-hospital preparation on chemotherapeutically induced mucositis.



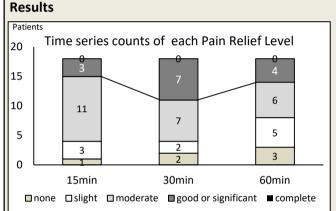


Fig.1 At 15-minute after administration, moderate pain relief represented a large majority. The 30-minute mark corresponded to the largest number of patients-7- who reported good or significant pain relief.



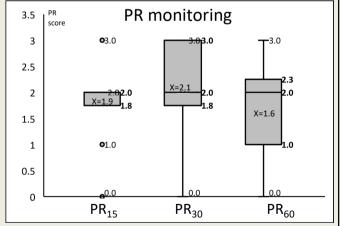


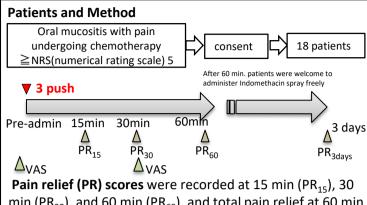
Fig.2 Box plot of pain relief score. At 30-minutes after administration, the PR range of lower quartile and upper quartile and mean (X=2.1) were highest.

Discussion

The application of Indomethacin spray reduces oral mucositis pain and will contribute to the improvement of the patient's quality of life.

Conclusion

In conclusion, Indomethacin Spray is significantly effective for the relief of chemotherapeutically induced pain associated with oral mucositis, and is a useful preparation for immediate self-medication.



Pain relief (PR) scores were recorded at 15 min (PR_{15}), 30 min (PR_{30}), and 60 min (PR_{60}), and total pain relief at 60 min ($TOTPR_{60}$) was calculated.

Pain level was recorded using a visual analog scale (VAS), before the first administration and 30 min after.

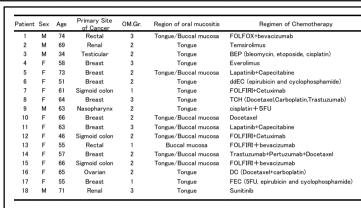


Table1 Patients list. 5 male and 13 female patients participated in this study. Mean of age was 60.6 . Mean of mucositis grade was 2.1 (NCI CTC AE ver.3) Breast cancer patients were eight of 18 and the largest group. (OM. Gr: Oral mucositis grade)

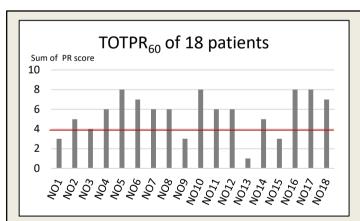


Fig3. Fourteen patients out of 18 (77.8%), reported effective pain reduction(TOTPR $_{60}$ \ge 4). Mean of TOTPR $_{60}$ was 5.0 \pm 2.60.

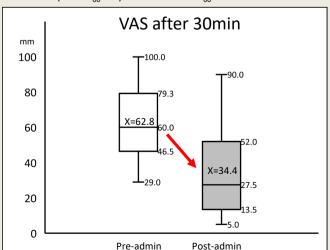


Fig.4 Before administration, mean of VAS (\pm SD) = 62.8 \pm 20.7mm, fell significantly to 34.4 \pm 23.3mm at the 30-minute mark (P=0.001 by Wilcoxon signed-rank test). Almost cut in half.