

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 3, April 2023

Formulation and Evaluation of Medicated Chewing Gum of Ondansetron by using Guava Leaves Extract as a Natural Excipient

Arti Kushwaha¹, Komal Padme², Dr. Nandu Kaynde³

Bachelor of Pharmacy, Thakur Shivkumarsingh Memorial Pharmacy College, M. P., India¹ Department of Pharmaceutics, Thakur Shivkumarsingh Memorial Pharmacy College, M. P., India² Department of Pharmacology, Thakur Shivkumarsingh Memorial Pharmacy College, M. P.,³

Abstract: The main objective of the present study was formulation & evaluation of medicated chewing gum of Ondansetron by using guava leaves extract as a natural excipient. MCG of Ondansetronis an excellent drug delivery system for self medication as it is convenient. MCG were prepared by direct compression mold method. Ondansetron HCL, ascorbic acid, gum base(including PEG 400, PVP, elastomer), ginger, flavouring agent, calcium carbonate, dextrose, coloring agent, glycerine & guava leaves extract were used in the different concentration. In these formulation guava leaves extract was prepared by Maceration process & it was used as a natural excipient which overcomes the drawbacks of chewing gum & Ondansetron like diarrhea, dizziness, stomach pain, constipation etc. & ginger was used to reduce the nausea and vomiting. Medicated chewing gum is a cost-effective product & also showed better compliance.

Keywords: Medicated Chewing Gum, Ondansetron Hydrochloride, Gum base, Mold

REFERENCES

- [1]. Vaishya Prabhanshu, Mishra Ashwani and Pathak Anupam. "Formulation and evaluation of medicated chewing gum of Ondancetron HCl for chemotherapy induced nausea and vomiting. "Scholars Research Library, 2015,7(5):80-86, ISSN 0975-5071.
- [2]. Kumar Ritesh, Solanki Pavitra, Chandra Amrish. "Medicated Chewing Gum- A Novel Drug Delivery System: An Updated Review. American Journal of Advanced Drug Delivery ISSN 2321-547X, 2014;5:17-4.
- [3]. PatelVipul P., Desai Tushar R., Dedakiya Arjun S., BandhiyaHemant M. Medicated ChewingGum: A Review. International Journal of Universal Pharmacy and Life Sciences Volume-1/Issue-1/July- August 2011 Page no. 111-128.
- [4]. Pagare Prashant K., Satpute Chandrakant S., Jadhav Varsha M. andKadam Vilasrao. "Medicated Chewing Gum: A Novel Drug Delivery System." Journal of Applied Pharmaceutical Science02 (06); 2012: 40-54, ISSN: 2231-3354.
- [5]. Imfeld T. "Chewing gum-facts &fiction: A review of gum-chewing & oral health. Cret Rev Oral Biol Med. 1999;10:405-19.(PubMed)
- [6]. Madan N, Rathnam A "chewing gums for optimal health." Chron young sci 2011;2:7.
- [7]. Rassing MR. "Chewing gum as a drug delivery system. Advantages of drug delivery review". 1994;13:89-121.
- [8]. Gomathi J., Sathishkumar .P, Sheik Muhammad Tharves .S."A Review on Medicated Chewing Gum as a Novel Drug Delivery System." International Journal of Pharmaceutical Sciences Review and Research, ISSN 0976-044X 2021;Article No. 02, Pages: 5-11.
- [9]. Pathak Neha. "Health Benefits of Guava." 2020. Available from: https://www.webmd.com/webmd-editorial-contributors
- [10]. Dass Ritika, Choudhary Tanya."16 Useful Guava Leaves Benefits For Your Hair, Skin, & Health."2022. Available from:https://www.stylecraze.com/?ref=nav

Copyright to IJARSCT www.ijarsct.co.in DOI: 10.48175/568



176

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 3, April 2023

- [11]. Agrawal A, Sudhakar C. Design & development, characterization & in vitro evaluation of medicated chewing gum: Granisetron hydrochloride.J Drug Deliv Ther 2019;8:43-
- [12]. Wathore Sandeep A, Kale Vijay Kumar M and Pandhare Yuvraj L. Formulation development and evaluation of medicated chewing gum of granisetron. The Pharma Innovation Journal 2019; 8(8): 283-286ISSN (P): 2349-8242.
- [13]. Lall Dipesh, Rathor Shruti, Soni Pranay. Formulation & Evaluation Of New Medicated Chewing Gum For The Treatment Of Nausea & Vomiting Induced By Chemotherapy, Radiation Therapy, & Postoperative Conditions In Cancer. Asian J Pharm Clin Res, Vol 13, Issue 4, 2020, 157-160.
- [14]. Pundir S, Verma AM. Formulation Development & Evaluation Of Antiemetic LozengesOfOndansetron Hydrochloride . International JournalOfPharmaceuticalResearch & Bio-ScienceISSN: 2277-8713, 2014; Volume 3(3): 365-372.

