FORMULATION AND EVALUATION OF TRICLOSAN DISPERSIBLE TABLETS FOR ORAL HYGIENE

K.Mayuri* and Krishna Mohan Chinnala

Department of Pharmaceutics, School of Pharmacy, Nalla Narasimha Reddy Educational Society's Group of Institutions, Hyderabad, India - 500 088.

*Corresponding Author E-mail: kondamayuri@gmail.com

ABSTRACT:

In human anatomy mouth is the earliest segment of alimentary canal which receives food and fabricates saliva, which is one of the foundation for bacterial development due to accretion of sugars form food chunks. There have been more than 300 kinds of bacteria set up in the mouth.

The purpose of the present study is to investigate the number of microbes' grown-up at different timings of the day. Samples were collected from individual volunteers and colonies were counted; the utmost count was noted as in the range of 190-200. The same samples were used to calculate minimum inhibitory concentration of Triclosan, the antibiotic. Triclosan dilutions were prepared and analyzed for the inhibition zones, it resulted that 300 mg of the drug have shown satisfactory results. Triclosan was formulated into a dispersible tablet to enable dispersion of tablet into water for rinsing the oral cavity to remove the contaminants. The Dispersion time of the tablet was within the range of 43.66-111.33 seconds. It was observed that formulation was acceptable with reasonable limits of standard required for dispersible tablets. Addition of superdisintegrant enhanced the dispersion time which facilitates easy mixing of tablet in water.

Overall the results suggested that formulation into mouth wash tablet would increase patient compliance for maintenance of oral hygiene. Dispersing the tablet in water just before rinsing would gradually reduce the number microbes in oral and dental cavities and further decline the chances of dental disease occurrence.

It concludes that superdisintegrant addition technique is a useful method for preparing dispersible tablets by wet granulation method, and this further reduce the microbial attack on tooth by rinsing each time after meals, upon doing so on long term basis the dental decays will be probably eradicated.

KEYWORDS: Dispersible tablets, oral hygiene, Triclosan, dental, decay, microbes.