

Formulation and Evaluation of Herbal Toothpaste

Bangar Prathamesh K¹ and Shelke Dipali S²

Department of Pharmacology, Samarth Institute of Pharmacy, Belhe, Maharashtra, India^{1,2}
prathameshbangar09@gmail.com

Abstract: *In the current context in oral dental care the use of herbal toothpaste containing natural ingredients is more widely accepted in public belief than chemical-based formulations for safety and efficacy in reducing tooth decay, and preventing other dental problems that this generation is prone to. In this building we use aloe vera gel, clove oil, neem powder, pomegranate leaf powder and trikatu that have not been used by any other research work. These quotes have many functions such as anti-ulcer, anti-caries, anti-bacterial, wound healing including many other special features such as anti-cancer and fungal. Along with this herbal-based formulation, a comparative study of pre-marketed herbal toothpaste was performed to obtain an overview of the body's key parameters namely pH, stability, elasticity, spread, rowing, homogeneity similarity to create a more effective formulation and stable performance. The purpose of this study was to compare and evaluate toothpaste with a commercial toothpaste. This study suggests that our composition of herbal based toothpaste with natural ingredients is as good as in terms of results compared to the composition of herbal medicines.*

Keywords: Herbal toothpaste, marketed herbal toothpaste, Antimicrobial activity, comparison and evaluation

REFERENCES

- [1]. George J, Hegde S, KS R, Kumar A. The efficacy of a herbal-based toothpaste in the control of plaque and gingivitis: A clinico-biochemical study. *Indian J Dent Res.* 2009;20(4): 480-482.
- [2]. Siswomihardjon W, Badawi S S, Nishimura M. The difference of antibacterial effect of neem leaves and stick extracts. *Int Chin J Dent.* 2007;7: 27-29.
- [3]. Prashant GM, Chandu GN, Murulikrishna KS, Shafiulla MD. The effect of mango and neem extract on four organisms causing dental caries: Streptococcus mutant, streptococcus salivavivus, streptococcus mitis, and streptococcus sanguis: An in vitro study. *Indian J Dent Res.* 2007;18(4): 148-151.
- [4]. Shah S, Venkataraghavan K, Choudhary P, Mohammad S, Trivedi K, Shah S G. Evaluation of antimicrobial effect of azadirachtin plant extract (SoluneemTM) on commonly found root canal pathogenic microorganisms (viz. Enterococcus faecalis) in primary teeth: A microbiological study. *J Indian SocPedoPrev Dent.* 2016;34(3): 210-216.
- [5]. Dr. Gaud RS, Dr. Gupta GD. *Practical Microbiology.* NiraliPrakashan, Pune. 2016; 10th Ed. pp.63-78.
- [6]. Singh K, Singh P, Oberoi G. Comparative studies between herbal toothpaste (dantkanti) and non-herbal tooth paste. *Int J Dent Res.* 2016;4(2): 53-56.
- [7]. Kokate C K, Purohit A P, *Pharmacognosy*, 4th edn, NiraliPrakashan ; 11 : 81-94.
- [8]. Shende V, Telrandhe R. Formulation and evaluation of Tooth Gel from Aloe vera leaves extract. *Int J Pharm Drug Analysis.* 2017;5(10): 394-398.
- [9]. Telrandhe R, Mahapatra D K, Kamble M A. Bombax ceiba thorn extract mediated synthesis of silver nanoparticles: *Int J Pharm Drug Analysis.* 2017;5(9): 376-379.
- [10]. T Mangilal, M Ravikumar. Preparation and Evaluation Of Herbal Toothpaste And Compared With Commercial Herbal Toothpastes: An Invitro Study. *Int J Ayu Herb Med.* 2016; 3(6): 2266-2273.
- [11]. Mithal BM and Saha RN. *A handbook of cosmetics.* VallabhPrakashan. 2000; 1st Ed. pp. 204-212.
- [12]. Dange VN, Magdum C.S, Mohite SK and Nitlikar M. Review on Oral Care Product: formulation of toothpaste from various and extracts of tender twigs of neem, *J of Pharm Res.* 2008; 1(2): 148-152.
- [13]. Sherikar AS and Patil RA. Standardization of polyherbal formulations: containing Cassia angustifolia. *International Journal of Pharmacy and Life Sciences.* 2010; 1: 213-216.

- [14]. Clark-Perry D, Levin L (December 2020). "Comparison of new formulas of stannous fluoride toothpastes with other commercially available fluoridated toothpastes: A systematic review and meta-analysis of randomised controlled trials". *International Dental Journal*. 70 (6): 418–426.
- [15]. Soeteman GD, Valkenburg C, Van der Weijden GA, Van Loveren C, Bakker E, Slot DE (February 2018). "Whitening dentifrice and tooth surface discoloration-a systematic review and meta-analysis". *International Journal of Dental Hygiene*. 16 (1): 24–35.
- [16]. Dhingra K (April 2014). "Aloe vera herbal dentifrices for plaque and gingivitis control: a systematic review". *Oral Diseases*. 20 (3): 254–67.