

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201941011167 A

(19) INDIA

(22) Date of filing of Application :22/03/2019

(43) Publication Date : 29/03/2019

(54) Title of the invention : CHITOSAN BASED SUSTAINED RELEASE GINGIVAL PATCH CONTAINING ACECLOFENAC AS A NOVEL LOCALIZED DRUG DELIVERY SYSTEM FOR PAIN MANAGEMENT POST PERIODONTAL SURGERY

(51) International classification :A61M37/00
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Dr. SHAILA KOTHIWALE

Address of Applicant :DEPARTMENT OF PERIODONTICS,
KLE V K INSTITUTE OF DENTAL SCIENCES, KLE
UNIVERSITY, NEHRU NAGAR, JNMC CAMPUS, BELGAVI
Karnataka India

2)Dr. MEGH MEHTA

3)Mr. BHASKAR KURANGI

(72)Name of Inventor :

1)Dr. SHAILA KOTHIWALE

2)Dr. MEGH MEHTA

3)Mr. BHASKAR KURANGI

(57) Abstract :

Periodontitis is a globally prevalent inflammatory disease characterized by periodontal tissue destruction. Periodontal disease continues to be one of the principle problems of mankind. Thus it is advocated to diagnose and treat the periodontal diseases in early stage. The main purpose of the periodontal therapy is to eliminate inflammatory processes in order to arrest the progression of the disease and keep the dentition in the state of health. Periodontal therapy includes surgical and nonsurgical approaches. The post-surgical therapy is followed with the prescription of systemic analgesics to eliminate the pain. Systemic administration of the analgesics leads to needless distribution to the other parts of the body. It also showcases the inability to maintain the therapeutic concentration of the analgesics in the gingival crevicular fluid, where the systemic administration can limit its effectiveness. Patient compliance is also a recognized drawback of the systemic administration. A few patients do have adverse effects with systemic analgesics like gastrointestinal adverse effects like bleeding, ulceration, and perforation. Over the last decade local drug delivery systems have been optimized in attempts to treat periodontal disease. Local application of the drugs increases the drug concentration at the site of application, increasing localized concentration, extends the time of drug delivery as well as the prevention of the systemic complication. Other advantages offered are patient compliance, ease of application, etc. Accordingly to the design, this innovative drug delivery system, improves patient compliance, favors a more intimate contact of the drug with the absorption mucosa and plays a vital role in relieving pain. NSAIDs are the most commonly prescribed drugs in post-surgical procedures. Nonsteroidal anti-inflammatory drugs (NSAID) inhibit the synthesis of prostaglandins and reduce inflammatory reaction and nociceptive stimuli and thus contribute to the control of pain. Of the NSAID currently available, aceclofenac has a potent analgesic, antipyretic and anti-inflammatory action. It also inhibits PG synthesis & has short lasting antiplatelet action and is thus drug of choice. Aceclofenac (ACE) was developed by chemical modification to enhance the tolerability of diclofenac and decrease the common side effects. Hence, the study aims to formulate and evaluate the efficacy of the chitosan based sustained release gingival patch containing aceclofenac for pain management post periodontal surgical therapy. To minimize the fore mentioned adverse effects caused by the systemic analgesics the study was conducted to formulate the chitosan based sustained release gingival patch containing aceclofenac of which 1x1cm contained 10 mg of drug. The clinical study was conducted in 19 patients at bilateral sites considering inclusion and exclusion criterias. The study included test and control groups. In the test group post periodontal surgery the chitosan based sustained release patch was applied on the gingiva at the surgical site followed by the placement of the periodontal pack. Whereas in the control group only the periodontal pack was applied at the post-operative surgical site after periodontal surgery and they were prescribed the analgesic (aceclofenac 100mg) twice daily for 3 days once they experienced pain. The post-operative pain was assessed using Wong-Baker faces pain rating scale at varied time intervals for 24 hours. The results showed that the patients in the test group had no pain whereas the patient in the control group had mild pain owing they were prescribed oral analgesics (Aceclofenac 100mg) Thus it can be concluded that chitosan based sustained release gingival patch containing aceclofenac can be effectively used as local drug delivery agent at the surgical site to relieve the pain and discomfort post periodontal surgeries.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201941043681 A

(19) INDIA

(22) Date of filing of Application :28/10/2019

(43) Publication Date : 15/11/2019

(54) Title of the invention : PHYTOPHARMACEUTICAL DENTURE CLEANSING FORMULATION

(51) International classification :A01N65/44
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1 **Dr. RAGHUNATH PATIL**

Address of Applicant :DEPARTMENT OF PROSTHODONTICS ANDCROWN AND BRIDGE, KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH'S KLE V.K. INSTITUTE OF DENTAL SCIENCES, NEHRU NAGAR, JNMC CAMPUS, BELAGAVI Karnataka India

2)Dr. **TEJASHREE R CHOUGULE**

3)Mr.U.B.BOLMAL

4)Dr.Mrs. S.C.METGUD

(72)Name of Inventor :

1)Dr. **RAGHUNATH PATIL**

2)Dr. **TEJASHREE R CHOUGULE**

3)Mr.U.B.BOLMAL

4)Dr.Mrs. S.C.METGUD

(57) Abstract :

The present invention relates to the development of phytopharmaceutical denture cleansing formulation. It particularly relates to the development of phytopharmaceutical denture cleansing tablet formulation with extracts of Ocimum sanctum and Cymbopogoncitratu s and their dental applications. It specifically relates to the development of phytopharmaceutical denture cleansing tablet formulation against Candida albicans .The invention also pertains to the development of process for preparation of phytopharmaceutical tablet formulation with aqueous extracts for dental applications. Phytopharmaceutical denture cleansing formulation comprising effective amount of extracts of Ocimum sanctum and Cymbopogoncitratu solong withone or more excipients or carriers.Process for preparation of phytopharmaceutical denture cleansing formulation comprising mixing of effective amount of extracts of Ocimum sanctum and Cymbopogoncitratu swithone or more excipients or carriers to form the formulation.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201941047544 A

(19) INDIA

(22) Date of filing of Application :21/11/2019

(43) Publication Date : 06/12/2019

(54) Title of the invention : NANO BIO GEL OF GARCINIA MANGOSTANA (MANGOSTEEN)

(51) International classification :A01H1/06
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)DR.PRASHANT A KARNI

Address of Applicant :DEPARTMENT OF
PROSTHODONTICS ANDCROWN &BRIDGE, KLE
ACADEMY OF HIGHER EDUCATION AND RESEARCH'S
(KAHER) V.K. INSTITUTE OF DENTAL SCIENCES, NEHRU
NAGAR, JNMC CAMPUS, BELAGAVI KARNATAKA-590010
Karnataka India

2)DR.AAYUSH K SHAH

3)MR.U.B. BOLMAL

4)DR.(MRS)S.C.METGUD

(72)Name of Inventor :

1)DR.PRASHANT A KARNI

2)DR.AAYUSH K SHAH

3)MR.U.B. BOLMAL

4)DR.(MRS)S.C.METGUD

(57) Abstract :

The present innovative invention relates to the development of Nano bio gel incorporated with Garcinia Mangostana (Mangosteen) in dental applications. It specifically relates to the development of Garcinia Mangostana (Mangosteen) incorporated Nano Bio Gel against Porphyromonas gingivalis and Staphylococcus aureus. The invention also pertains to the development of process for preparation of Garcinia Mangostana (Mangosteen) incorporated Nano Bio Gel for therapeutic and preventive purposes in dental applications. Nano biogel formulation for prevention and treatment of peri implantitis comprising effective amount of extract of nano bio particles of mangosteen and gelling agent or excipients or carriers along with preservatives.

No. of Pages : 30 No. of Claims : 10