

MUCOADHESIVE BILAYER BUCCAL PATCHES CONTAINING ANTIFUNGAL AND ANTIBACTERIAL AGENTS

This invention provides a method to obtain buccal patches that allow the controlled release of antibacterial or/and antifungal products in the buccal cavity.

TYPE OF DEVELOPMENT

Drug release device.

DESCRIPTION

The use of dental splints causes a bad taste in the mouth, after a time of using it. This effect is due to the presence of bacteria. Other complaints can be wounds, sores, infections, xerostomia or, in general, pain in the buccal cavity. The controlled release of antibacterial and/or antifungal active principles contained in the mucoadhesive buccal patches synthesized in our invention, achieve a total disinfection of the buccal cavity.

Small, homogeneous, firm patches with a gelatinous appearance have been obtained, with rapid mucoadhesion when placed on the buccal mucosa with slight pressure. They present a total adherence until the complete release of the active principles and provide a perfect local disinfection. These properties, together with the organoleptic, flavor and texture, meet the requirements established for the application in the medical practice. In tests carried out with volunteers, in none of the cases they have caused irritation or discomfort to the patient.

Synthesis of the mucoadhesive buccal patch on a laboratory scale. Tests of disinfection efficacy and

organoleptic properties of the synthesized mouth patch carried out.

INDICATION

Mucoadhesive buccal patches can be used for:

- Infections of the buccal cavity.
- Neutralize diabetes ketoacidosis for diabetes patients.
- Avoid the ammonia characteristic breath in advanced renal failure patients.

NOVELTY/ADVANTAGE

Mucoadhesive buccal patches of this invention suppose a novelty to avoid the infections of buccal cavity and therefore an advantage to fight the bad breath in children and adults. They neutralize the bad smell in any type of intraoral devices, reduce the microorganisms in the buccal cavity and help to prevent the etiological factor in the periodontal, osteointegrated, gingival and periimplant diseases.

Combination with antibacterial agents of natural origin offer advantages as prophylactic or inespecific defense factor to increase the resistance of organism in impoverishment or pandemic periods.



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IPR STATUS

Patent Pending.

COOPERATION GOAL

Company interested in licensing and commercializing the product.