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Action Soap Misca-Mates in the Treatment of Scabies.

Soumahoro-Thes Pehie M*, Bagre I, Coulibaly FA, and Djama Allico J.

Pharmacodynamics Biochemical Laboratory UFR Biosciences University of Felix-Houphouët –Boigny, Abidjan Cote d'Ivoire.

ABSTRACT

Scabies is an infection caused by a parasite called *Sarcoptes*. This condition is very frequent and cosmopolitan. This is not a disease anyone can be affected regardless of their sex. It is easily and quickly spread through the community farm life such as child care and the accommodation centers. To solve this problem our team has developed a dermo-pharmaceutical soap combining plant oils treating cutaneous infections (*Mitracarpus scaber* *Cassia alata* and *Mareeya micrantha*). We realized a clinical trial on patients. The study has shows that the soap is active and the application allows complete healing of scabies.

Keywords: *Mitracarpus scaber*, *Cassia alata*, *Mareeya micrantha*, Scabies.

**Corresponding author*

INTRODUCTION

Scabies is an itchy skin condition caused by a tiny burrowing mite called *Sarcoptes Scabiei* (Andrews et al., 2009). Human scabies affects mainly the portion of 30-40 years because of a power greater risk in precarious living conditions or when traveling. It is transmitted directly to skin especially during sexual intercourse or by the intermediary of the bedding (Bouvresse and Chosidow, 2010). They are present worldwide and can reach all races and both sexes (Carol Turkington and Jeffrey s. dover, M.D, 2006; Hay RJ, 2009). The parasite mite that causes scabies infested hot and humid skin folds such as armpits buttocks and groin (Markel L et al., 2006). They are found at the back of the knees in the interior of the elbows and wrists and fingers. It is rare that scabies is fixed to the scalp or palms of hands and soles of the feet (Gates and Robert H, 2003; Bouchet P. et al., 1989). However young children or those infested by a very large number of mites may also be key in these areas. In the elderly is sometimes observed a mite along the scalp to the neck on the temples and forehead. Several factors explain the increase in infections, it is:-The promiscuity (crèches, schools, family epidemics). (Habif TP, 2010; Hicks MI. and Elston DM, 2009)

- Lack of hygiene
- Moisture and heat

Faced with this situation several laboratories have undertaken research for the development of new drugs (Abo J C et al., 2000; Guede-guina F et al., 1991). It is in this spirit that our research team has undertaken to evaluate the activity of a pest soap developed from oils *Mitracarpus scaber*, *Mareeya micrantha* and *Cassia alata* three medical plants stretched in the treatment of dermatoses in the West African pharmacopoeia (Bouquet, A and Debray M, 1974; Moulinier, 1988).

MATERIAL AND METHODS

Material-Biological

Material vegetal

It is consists of three medicinal plants

Mitracarpus scaber (Rubiaceae) MISCA coded speed frequent in the upland areas of the forest to the savannah of Cote d'Ivoire. In traditional medicine this plant is used to treat herpes soft buttons and other body canker (Guede- guina et al., 1996; Bonga G M et al.,1998).

Mareeya micrantha (Benth Il.Arg-M) (Euphorbiaceae) coded speed G243 traditionally used in Cote d'Ivoire for its laxative properties and ocytocises.

Cassia alata (Caesalpiniaceae) is a plant native to America and is frequent in all tropical areas from Senegal to Nigeria. The aqueous decoction of the fresh leaves is advisable to women presenting for vaginal and this decoction is used in the treatment of dermatoses. These plants were identified by Professor-AKE ASSI Floristic National Centre of the University of Cocody (Abidjan Cote d'Ivoire) or specimens have been deposited.

Methods

Preparation of oils

Washed and dried plants are rendered thanks to a fine powder mill IKA MAG (Holt R, 1975). The oils from these three plants were extracted by Soxhlet method according to IUPAC (Agustina de Aragón, П, 1968; kapseu C. and Parmentier M, 1997). The extraction is carried out with hexane. The solvent is evaporated in a Rotavapor BÜCHI 60 ° c (Ajello L et al., 1963). The vegetable oils from MISCA, G243 and *Cassia alata* are obtained. These oils have been used subsequently for the production of dermo-pharmaceutical soap.

The manufacture of soap from oils *Mitracarpus scaber*; *Mareeya micrantha* and *Cassia alata*.

On uses the method of soap cold. This process involves the treatment of fatty substances with a given amount of alkali without having rejection worn soda. Two kinds of oil (50% shea butter and coconut oil 50%) are the fat and the soap is performed with 82% oil and 18% of water. The amount of soda used is calculated from the saponification of oils chosen. The vegetable oils are considered as additive and updates when the soap begins to thicken (Georg L K, Kaplan W, And Kaufman L, 1963).

RESULTS

Test treatment of two cases of scabies.

Our investigations were made with both voluntary patients. The cutaneous infection is treated scabies.

Figs 1 represents both of mites before and after treatment.



Before treatment: of purulent buttons itching accompanied the night



After treatment: Disappearing buttons total healing

Figs 1A represent a case of scabies in the elbow of a young girl

Figure 1A: Scabies at the elbow of a young girl



Before treatment: skin rash underfoot



Figure 1B: Scabies under the foot of an infant

After treatment: the buttons are gone healing is total

Before the treatment: the pus accompanied buttons itching at night

After the treatment: Disappearing buttons total healing

Figs 1B represent a case of scabies super infection under the foot of an infant

Before the treatment: skin rash underfoot

After the treatment: the buttons are gone healing is complete

DISCUSSION AND CONCLUSION

In this study our goal was to develop an anti-infective soap is a base of active oil of MISCA, *Mareeya micrantha* and *Cassia alata*.

The experiment was performed on two cases of scabies showed that the soap with two to three washes per day allows elimination of the infection. The two patients treated experienced an

improvement for seven days of treatment and all have been cured between the eighth and fourteenth day of observation (100% healing). There was no recurrence between the fifteenth and thirtieth day of observation. We deduce that the soap effectively treats scabies. The soap is active. Of additional studies are needed to find a very dosage form appropriate.

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