RESEARCH ARTICLE



Soumahoro.T. P.M et al, The Experiment, 2014, Vol.24 (3)1668-1672

INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY

ACTION SOAP MISCA-MATES IN THE TREATMENT OF PSORIASIS

ABSTRACT

Psoriasis is a chronic and inflammatory disease that is characterized by lesions on the skin. It affects one in 50 persons. It usually is characterized by the appearance of thick patches of skin that flake (which stand in the form of scales black). It can occur at any age but it most often occurs between 15 and 50 years. To solve these problems, our team finalized a dermo-pharmaceutical soap associating the oils of plants treating the cutaneous infections (Mitracarpus scaber, Cassia alata and Mareya micrantha). We achieved a clinical test with soap on sick patients. The survey showed that soap is active and his application permits a total recovery of Psoriasis.

key words Mitracarpus scaber, Cassia alata, Mareya micrantha, Psoriasis.

INTRODUCTION

It is a chronic and benign skin disease characterized by erythematous scaly lesions. Psoriasis is frequent both in men than in women. 2% of the world population suffers from psoriasis ^{(10).}

The disease is very rare in people has dark skin. The onset of the disease is progressive usually between 10 and 40 years without alteration of the general state. The elementary lesion is psoriatic closet rounded or oval although limited as an erythematous base (redness) surmounted many scales in spot candle ^{(15).}

The scales are the dead that accumulate in excess cells. Cell renewal is accelerated effect in psoriasis. The disease is not serious but its evolution in spurts is very long and hopeless. It can have consequences on the quality of life issues because sometimes significant physical changes. It is absolutely not contagious ⁽¹⁸⁾.

The cause of the disease remains unknown despite all the current research. A family history of psoriasis is common. In its benign form psoriasis is limited to the scalp nails knees elbows feet hands and sometimes the genitals. In severe cases it extends and can win the totality of the body. Psoriasis can be very unpleasant or even painful when it occurs on the palms soles of the feet or in the folds of the skin. The extent of the disease varies greatly from one person to another. Depending on where the plates are situated and extended psoriasis can be embarrassing and harmful to society. Indeed the eyes of others on skin diseases are often hurtful ⁽⁹⁾.

Several factors are involved in the onset of the disease especially genetic factors (hereditary aspect of psoriasis is important since patients with psoriasis are between 30 and 50% have a parent with the disease) environmental (the friction of clothing, the sensitivity to certain tissues, seasonal changes) and physical stress (infections, injury, surgery, drugs etc..) or mental (nervous exhaustion, anxiety etc..) can contribute to the outbreak of the disease $^{(14)}$.

Psoriasis may also be caused by autoimmune reactions occurring in the skin. These reactions stimulate the proliferation of cells of the epidermis. In people with psoriasis, these cells are renewed at a much too fast: every 3 to 6 days rather than every 28 or 30 day. Being given the life span of skin cells is the same they accumulate and form thick crusts ⁽¹⁰⁾.

There are several types of psoriasis. The most common form is plaque psoriasis also called plaque psoriasis (because it represents more than 80% of cases). The other forms are guttate psoriasis erythrodermic psoriasis (generalized form) and pustular psoriasis or psoriasis of the nails. The disease evolves in quite unpredictable and highly variable among individuals. The symptoms usually last 3 to 4 months and then can disappear for months or even years (the period of remission) and then reappear in most cases. People with a form of moderate or

www.experimentjournal.com

RESEARCH ARTICLE



Soumahoro.T. P.M et al, The Experiment, 2014, Vol.24 (3)1668-1672

INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY

severe psoriasis can be very be affected by their appearance and thus suffer from stress anxiety loneliness loss of self-esteem and even depression of.

However regardless of the type of psoriasis its manifestation is almost always the same:

- plates slightly raised more or less large black vaguely round
- dander (skin pele) or shiny black lesions on;
- organs genitals and buttocks often skate keys
- itching (conditions caused by dewatering of the skin)⁽⁹⁾

Faced with this situation several laboratories have undertaken research for the development of new drugs. It is in this spirit that our research team has undertaken to evaluate the antifungal activity of a 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⁽⁷⁾.

1.EQUIPMENT AND METHODS 1.1 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 ⁽¹⁷⁾.
- Mareeya micrantha (Benth ll.Arg-M) (Euphorbiaceae) coded speed G243 traditionally used in Cote d'Ivoire for its laxative properties and ocytocises ^(1,6,8).
- 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 ^(5,11,1) 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

1.2Methods Preparation of huiles

Washed and dried plants are rendered thanks to a fine powder mill IKA MAG. The oils from these three plants were extracted by Soxhlet method according to IUPAC (11; 3; 2). The extraction is carried out with hexane. The solvent is evaporated in a Rotavapor BÜCHI 60 $^{\circ}$ c (11). 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 (2; 16;13).

RESEARCH ARTICLE



Soumahoro.T. P.M et al, The Experiment, 2014, Vol.24 (3)1668-1672

INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLO 2.RESULTS

Test treatment of two cases of psoriasis

Figure A represents a case of psoriasis before and after treatment at the knee. A total disappearance of the infection was observed after one month treatment.

Figure B represents the cases represent a case of psoriasis before and after treatment at the elbow. A total disappearance of the infection was observed after one month of treatment.

3.DISCUSSION and CONCLUSION

In this study, our goal was to develop an anti-infective soap is a base of active oil MISCA of Mareeya micrantha and Cassia alata. The experiment was performed on two cases of psoriasis showed the soap after one month of treatment allows the elimination of the infection. The soap is active allows complete elimination of the infection in the patient. Of additional studies are needed to find a very dosage form appropriate.

THANKS

Our thanks to all the healers that have allowed us to discover these three plants. Our thanks also go to the respect of our employees who have enabled us to realize this work.

REFERENCES

- 1. Abo j. c., aka k. j., ehile e. e., traore f et guede- guina f., (2000). effets cholinergiques de la fraction 2 (f2) d'un extrait aqueux de mareya micrantha (mar) sur la pression artérielle et l'activité cardiaque. ann. univ. bénin. sér. sciences. tome xiv ; 57-76.
- **2.** Agustina de aragón, π., (1968). informations oléicoles internationales, revue officielle de la fédération internationale d'oléiculture, 60, rue de richelieu. paris, 524 pp.
- 3. Ajello I., georg I. k., kaplan w. ad kaufman I., (1963). laboratory manual for medical mycology. 2nd. ed. john wiley and sons, inc. new- york.
- **4.** Bonga g., vangah-manda m., de souza c. et guede-guina f., (1995). mise en évidence de phytostéroides antifongiques contre cryptoccocus neoformans. revue méd. et pharm. afr., 9 (1) 21-30.
- **5.** Bonga g. m., kra a. k. m. et guede-guina f., (1998). identification chimique et pharmacologique des phytostérols anticryptococciques de misca, un antifongique naturel. jbna 98 abj ; 30 nov. -7 déc.
- 6. Bouchet p., regis p., madulo-leblond g., (1989). mycologie générale et médicale. masson- paris, 1-160.
- Bouquet, a. et debray, m., (1974). plantes médicinales de côte- d'ivoire. travaux et documents de l'orstom, n° 32. paris, france. 56-151.
- 8. Feuilhade de chauvin m., (1998). mycoses métropolitaines. encyclopédie médicale et chirurgicale, 19-20.
- **9.** Fitch e., harper e., skorcheva i., kurtz se., blauvelt a., (2007). pathophysiology of psoriasis: recent advances on il-23 and th 17 cytokines [archive], curr rheumatol rep, (9):461-467.
- 10. Griffiths ce., barker jn., (2007). pathogenesis and clinical features of psoriasis [archive], lancet, 370:263-271.
- **11.** Guede-guina f., washington b., tsai c. s., vangah-manda m., smith m d. and ochillo r. f., (1991). isolation of g243, a cholinergic agent from mareya micrantha. 12 th ann, seps meeting, new-orleans. nov. 8-9. abst 9.
- 12. Holt r. j., (1975). laboratory test of antifungal drugs. j. clin. path., (18), 767-774.
- 13. Kapseu c., parmentier m., (1997). composition en acide gras de quelques huiles végétales du cameroun. sciences des aliments

www.experimentjournal.com

RESEARCH ARTICLE



Soumahoro.T. P.M et al, The Experiment, 2014, Vol.24 (3)1668-1672

INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY

(7) 325 pp.

- 14. Menter a., griffiths ce., (2007) « current and future management of psoriasis » lancet; 370: 272-284 pmid 17658398 [archive]
- **15.** Poulin y., bissonnette r., juneauc et al, (2007). xp-828l in the treatment of mild to moderate psoriasis: randomized, double-blind, placebo-controlled study [archive], j cutan med surg. sep-oct; 10(5): 241-8
- **16.** Thes p. m., kra a. k.m., soumahoro i. a. et guede-guina f., (2005). evaluation et comparaison de l'activité antifongique des huiles de mitracarpus scaber (rubiaceae), «misca» et mareya micrantha (euphorbiaceae), « g243 » sur la croissance in vitro de candida albicans et trichophyton mentagrophytes. sci. nat. v2(2) :129-134.
- 17. Vangah-manda m., bonga g.m., de souza c. et guede-guina f., (1996). amélioration de l'action antifongique de misca, un extrait végétal contre cryptococcus neoformans. afrique biomédicale, 1, (1), 16-19.
- **18.** Zachariae h, (2003). prevalence of joint disease in patients with psoriasis: implications for therapy [archive], am j clin dermatol, (4) 441–447.

FIGURES



Before Treatment: of dry scaly patches although limited and variable size (psoriasis) in the knee



After treatment: Disappearing plates. Total healing.

www.experimentjournal.com

RESEARCH ARTICLE

Soumahoro.T. P.M et al, The Experiment, 2014, Vol.24 (3)1668-1672





Figure A: psoriasis at the knee of the girl.



After treatment: Disappearing plates. Total healing

Figure B: Psoriasis on the elbow of the girl.

*SOUMAHORO.THES PEHIE M. ⁽¹⁾, BAGRE I⁽¹⁾, DOUMBIA I⁽¹⁾, DJAMA ALLICO J. ⁽¹⁾.

¹Laboratoire de Pharmacodynamie Biochimique, UFR- Biosciences Universite Felix-Houphouet-Boigny de Cocody, Abidjan 22, Côte-d'Ivoire.