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(54) Title: TOPICAL COMPOSITION ON THE BASIS OF HONEY

(57) Abstract: Honey compound is an invention made mainly of pure bee Honey with some additives to be used as Cream for topical wound management. The additive augments the natural properties of the pure bee honey as an antimicrobial and wound healing promotion agent. Honey compound obviates the drawbacks of using pure bee honey for wounds, like the intense local pain, excessive fluid extravasation through the wound and wound dressings dryness which may compromise the healing process. Bacteriological investigations, laboratory animals' studies confirmed the superior effects of the honey compound as an antibacterial and wound healing promotion agent in comparison to pure bee honey, and other topical wound agents. The components of the honey compound are stable to produce its long lasting beneficial effects over the wounds through out the dressing regimen.

Honey Compound

Technical Field:-

Honey Compound is an invention in the medical field made mainly of honey with some other additives to act as a potent and safe wound dressing agent with an antimicrobial and wound healing promotion effects, in an optimum wet wound atmosphere

Background Art:-

Honey was used in the treatment of wounds and burns by the ancient Egyptians and other civilizations thousands of years ago. Its use has continued in folk medicine until recent years. Many reports have recently been published demonstrating specific and detailed functions of its effective components as regards its antimicrobial and wound-healing promotion effects.

In spite of the high quality of pure bee honey as a topical wound agent, compared with other topical wound agents, its use is not without certain problems that may limit its optimal application, such as the intense local pain that the patient feels soon after its application. This may be intolerable, particularly in children, as also the excessive body fluid loss through the wound due to honey 's high osmolarity. This fluid loss has to be seriously considered because of its haemodynamic impact, especially in patients with major burns and in children.

Excessive fluid loss through the burn wound may also alter the beneficial properties of the applied bee, by causing its rapid dilution and accelerating its washout from the wound surface.

5 It is also well known that within a few hours of application of honey dressing to the wound surface, the dressing will dry off because of evaporative water loss enhanced by body temperature, making subsequent dressing changes difficult and possibly compromising the natural wound healing process.

There are also available other trials of honey formulas with many draw backs which make its use unsafe and difficult.

Disclosure of Invention:-

10 In this invention a compound made mainly of pure bee honey with some other additives to improve its properties and to augment its local and systemic beneficial effects obviating the draw backs of its use.

Honey compound consists of the following components in this ratio for preparation:-

15	* Fresh pure natural unprocessed bee honey	1000 gm
	* Fresh pure virgin olive oil	100-150 ml
	* Fresh pure sesame oil	100-150 ml
	* Fresh pure rice flour	140-180 gm
	* Zinc oxide powder	60 gm
	* Olive leaf extract 10%	10 gm

20 The honey compound is prepared by adding the olive oil and sesame oil to the honey with continuous shaking then rice flour and zinc oxide powder are added then olive leaf extract is added with continuous shaking until complete mixing of the compound without heating.

25 It was proved through the bacteriological examinations how potent is the antibacterial and antifungal effects of the honey compound in comparison to a known antibacterial and antifungal ointments and in comparison to the pure bee honey.

30 It was also proved through the laboratory animal studies the potent effect of the honey compound to enhance wound healing in comparison to other topical wound agents and to pure bee honey without side effects.

Best Mode for Carrying Out the Invention:-

This invention presents a new compound made mainly of honey with other additives for topical wound management in which all of the beneficial properties of honey were preserved and enhanced and the drawbacks of using honey were obviated through:-

1- The oily content of the compound acts as a barrier preventing excessive loss of body fluids and decreasing evaporative wound water loss thus preventing wound desiccation and providing optimal wet atmosphere for wound healing. Olive oil contains polyphenolic compounds, which has an antibacterial effect to enhance wound healing.

Sesame oil has a local anaesthetic effect decreasing local wound pain.

2- Rice flour absorbs wound fluids thus keeping undiluted honey covering the wound for longer time.

3- Zinc Oxide improves the properties of the compound and supplies the wound with Zinc, which is very important trace element for wound healing process.

4- Olive leaf extract with its powerful antibacterial, antifungal and antiviral content augments the beneficial effects of the compound without any drawbacks.

Medical Applicability:-

Honey compound is a powerful topical cream for burns and wound healing enhancement and it can be used as follows:

- 5 The cream is applied to the burn or wound surface in a 1 mm thickness layer then covered with dressings according to the wounds depth and extent. Wounds dressings are changed when it become soaked or when cream removed that is to keep the wound covered with the cream all the time until wound healing.

Claims

- 1- **Pure bee honey** **1000 gm**
Characterized by
The bee honey should be pure fresh monofloral undiluted unprocessed.
- 5 2- **Olive Oil** **100 – 150 ml**
Characterized by
Olive oil should be fresh pure virgin prepared without heating or any other chemical additives, amount adjusted according to the liquidity of honey.
- 10 3- **Sesame Oil** **100 – 150 ml**
Characterized by
Sesame oil should be pure fresh prepared without chemical additives, amount adjusted according to the liquidity of honey.
- 15 4- **Rice Flour** **140 – 180 gm**
Rice flour should be fresh and ultrafine as a standard product for nutritional supplement, amount adjusted according to the liquidity of honey.
- 20 5- **Zinc Oxide** **60 gm**
Characterized by
Zinc oxide powder as a standard product of the pharmaceutical companies for medical use.
- 25 6- **Olive leaf extracts 10%:** **10 gm**
Characterized by
Olive leaf extract 10% without added sugar, salt, wheat, corn, yeast, soy derivatives, colourings, flavorings or preservatives.

INTERNATIONAL SEARCH REPORT

International application No. PCT/EG 2004/000003

A. CLASSIFICATION OF SUBJECT MATTER A23L 1/08, 1/076; A61K 9/06 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A23L, A61K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPODOC, WPI, PAJ				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 6171604 B1 (Mousa) 9 January 2001 (09.01.2001) <i>abstract; page 2, lines 14-35; page 3 line 43 - page 4 line 21; example 1; claims 3, 4 and 14.</i> --	1, 2		
Y	DE 20209721 U1 (Eckardt Rainer) 5 December 2002 (05.12.2002) <i>abstract; page 8, lines 13-19.</i> --	2		
Y	CN 1270834 A (Zhang G) 25 October 2000 (25.10.2000) <i>abstract.</i> --	3		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; border: none; vertical-align: top;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 4332509 A1 (Reese Potatoes Tiefkühlkost GmbH) 30 March 1995 (30.03.1995) <i>abstract.</i>	4
Y	-- WO 2001/030363 (Pavlovic Vojislav) 3 May 2001 (03.05.2001) <i>abstract; claim.</i>	5
Y	-- FR 2810887 A1 (Laboratoires Seporga) 29 June 2000 (29.06.2000) <i>page 5, lines 3-9.</i>	6

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report			Publication date	Patent family member(s)			Publication date
CN	A	1270834	2000-10-25	none			
DE	A	20209721 U1		none			
DE	A	4332509	1995-03-30	none			
FR	A	2810887	2002-01-04	none			
US	B	6171604	2001-01-09	US	A	6051647	2000-04-18
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				US	A	5900226	1999-05-04
WO	A	20010303 63		none			