

Patients were instructed to insert the tampons on four consecutive evenings, to wear each tampon 12 hours, and then to remove each tampon the following morning in order to complete a 24-hour time period between insertion of tampons. After removal of the second, third and fourth tampons at their respectively scheduled times, the vagina was irrigated with one liter of the following solution: 3.0% sodium ascorbate, 2.0% ascorbic acid, 1.5% zinc sulfate heptahydrate, 1.0% cysteine and 1000 cc distilled water.

The use of very small tampons for only 12 hours out of each 24 hours helped to minimize any disturbance to the normal bacterial flora and immersion of tampons in methanol immediately after removal stopped bacterial action.

Upon arrival back in the laboratory, tampons were packed individually into glass columns and washed with methanol in chromatographic fashion. Eluates were combined with methanol from the sample bottle, mixed with 100 μ l N/10 sodium hydroxide to reduce the volatility of the fatty acids, and evaporated to dryness. Residues were taken up in 1 ml water, washed with 4 ml ether (to remove basic and neutral components), and the aqueous layers were acidified (below pH 2.0) and extracted with 4 ml ether containing n-pentanol as a concentration marker. Extracts were concentrated to 50 μ l and analyzed on 10% FFAP columns in a Perkin Elmer gas chromatograph; programmed from 50 to 220 degrees C. at 5 degrees/min. Peaks were identified by absolute retention time, retention time relative to the concentration marker (n-pentanol), and retention time relative to the other members of the acid series. In addition, peaks produced by free fatty acids on FFAP columns have a characteristic tail not shown by less polar compounds. Other substances which might have interfered with chromatographic identifications would have been removed during the sample preparation. Peak areas were determined manually and expressed as ratios of the area of the n-pentanol peak.

After tampon collection 3 times and 3 irrigation treatments, the foul smell decreased and volatile fatty acids also decreased significantly ($p < 0.001$) as expressed in Table 4.

TABLE 4

Patient No.	VOLATILE FATTY ACIDS (C ₂ -C ₅) CONTENT (μ g) OF VAGINAL SECRETION BEFORE AND AFTER IRRIGATION TREATMENT			
	Before Irrigation*	After 1st Irrigation	After 2nd Irrigation	After 3rd Irrigation
A	162.4	110.8	60.6	30.8
B	140.1	130.6	90.9	46.7
C	110.5	105.3	80.7	42.3
D	179.8	110.9	70.2	36.4
E	145.2	120.3	81.4	48.6
x	147.6	115.58 (1)	76.76 (2)	40.96 (3)
S.D. \pm	25.35	9.98	11.63	7.37
S.E. \pm	11.61	4.46	5.20	3.29

*Control

(1), (2), and (3) Significantly different from Control ($p < 0.001$)

EXAMPLE 10

A pinkeye powder was made from 5 g vitamin C, 1 g zinc sulfate heptahydrate, 100 mg keratin sulfate and 2 g cysteine and packaged in aluminum foil for solution in 100 ml of sterilized water to which is added 2% by weight pectin which makes the solution stick to the eyes and 0.05% benzalkonium chloride which acts as a preservative.

Two hundred and eighty infected cattle, showing clinical signs of conjunctival hyperemia and edema, particularly of the bulbar conjunctiva and eighty of which showed an opaque area elevated from the cornea, were treated with the above-mentioned eye spray, by spraying 5 strokes into each eye for 2 days. On the second day, some improvement was noticed and the lesions showed an indication of healing and redness decreased significantly. After 5-7 days, the eyes of 269 of the animals were normal. The remaining 11 animals had ulceration in the cornea and eyelid and corneal opacity (abscess varying from a pale yellow to white) and there was a marked circumcorneal congestion of the conjunctival vessels. These 11 animals were treated for 4 days and became normal after 10 days.

One hundred and fifty other infected cattle were treated with thymol blue but only 30 of them showed improvement after 5-7 days. Another group of 148 infected animals were treated with 1% penicillin and only 7% showed an improvement after 5-7 days.

EXAMPLE 10

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained. As various changes could be made in the above compositions and methods without departing from the scope of the invention, it is intended that all matter contained in the above description shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A medication for treating epithelial tissue comprising vitamin C, a zinc salt and a sulfur amino acid in an amount sufficient to stimulate cell proliferation and new cell formation.

2. The medication of claim 1 further including a mucopolysaccharide.

3. The medication of claim 1 further including a polysaccharide.

4. The medication of claim 1 wherein the sulfur amino acid is selected from the group consisting of cysteine, cystine and methionine.

5. The medication of claim 4 wherein the vitamin C is present in an amount from 0.5 to 30% by weight, the zinc salt is present in an amount from 0.5 to 20% by weight as zinc sulfate heptahydrate or the equivalent amount of zinc present as some other zinc salt, and 0.25 to 5% by weight of sulfur amino acid.

6. The medication of claim 5 further including a mucopolysaccharide selected from the group consisting of chondroitin sulfate and hyaluronic acid.

7. The medication of claim 5 further including a mucopolysaccharide selected from the group consisting of heparin calcium salt or dermatan sulfate.

8. The medication of claim 5 further including keratan sulfate.

9. A method of treating epithelial tissue with a medication including vitamin C, a zinc salt and a sulfur amino acid in an amount sufficient to stimulate cell proliferation and and new cell formation which comprises applying said medication to the treatment area.

10. The method of claim 9 wherein the medication further includes a mucopolysaccharide.

11. The method of claim 9 wherein the medication further includes a polysaccharide.

12. The method of claim 9 wherein the sulfur amino acid is selected from the group consisting of cysteine, cystine and methionine.