

medicament in contact with the skin-surface. Elkonite is not rubbed off by the clothing or bed linen, but can be readily washed off with water. Since it does not spread to the hair and produce sticky smears, Elkonite makes a more satisfactory base for scalp ointments than the bases now available. The tars and dyes, which are very sticky and messy when made up in the usual ointments, with Elkonite give clean, dry adherent films, which make the treatment cleaner and less irritating to the skin, and prevent soiling of clothing.

The Elkonite gel was tried as an ointment base in the treatment of 63 patients (25 males and 38 females) with the following dermatoses: dermatophytosis, contact, seborrhœic and atopic dermatitis, pityriasis rosea, lichen simplex chronicus, scabies, impetigo, acne and pruritus ani. Salicylic acid, ichthyol, ammoniated mercury, resorcin, sulfur, naftalan, crude coal tar and its derivatives, balsam of Peru, gentian violet and oil of cade were used. The combinations and concentrations of the drugs used were those ordinarily employed in the treatment of these dermatoses. No incompatibilities were observed. The ointments were well tolerated on the glabrous skin and scalp, both in adults and infants. The response of the various dermatoses to treatment were approximately the same as with the use of the same drugs in other ointment bases. However, the improvement in the physical characteristics of the ointments was a distinct advantage.

Ointments prepared with Elkonite base maintained their consistency despite changes in temperature for a period of more than three months. They appeared to change on standing only if left in open containers from which the water of the ointment could evaporate.

SUMMARY

1. Elkonite is a colloidal clay made up mainly of aluminum magnesium silicate, is hydrophilic and swells in water. In 15 per cent concentration, it forms a gel.

2. Addition of acid or alkali to fluid suspensions of Elkonite greatly increases the hydrophilic property as shown by increases in viscosity. Some of the acid or base is adsorbed on the colloid, as shown by p_H measurements.

3. The adsorptive power for dyes and ions and the gel-like nature of Elkonite indicate that it might be a useful agent for oral administration in gastro-intestinal disorders. Preliminary trials indicate that clinical effects can be obtained, as shown by alterations in intestinal motility, and relief of symptoms.

4. Continued administration for 5 months to rats of Elkonite in 10 per cent con-

centration in their diet had no demonstrable influence on the rate of growth, but resulted in a definite increase in food intake over that of a parallel series of control animals. Radiologic examination and direct inspection of the gastro-intestinal tract of these rats indicated normal conditions throughout the experimental period. However, there was a work hypertrophy of the digestive tract of the Elkonite fed rats amounting to an 11 per cent increase in weight over that of the controls, being more marked in the stomach than in the intestines.

5. The most promising clinical usefulness of Elkonite would appear to be as a gel of 15% strength to be used as an ointment base. This has the following advantages over bases in common use: dries on the skin and leaves an adherent film of the medication which will not rub off, and does not stain or smear clothing, yet can be readily removed by washing with water. The advantage of a non-greasy or sticky ointment is especially marked in applying medication to the scalp and the pubic or perineal regions.

REFERENCES

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Effect of Catalysts on Hydrogen Peroxide

Substances which catalyze the decomposition of hydrogen peroxide increase its germicidal effect against *Bacillus Coli*. It is reported that the addition of ferric or cupric sulfate increases the phenol coefficient of hydrogen peroxide 100 times. This effect is produced by the addition of 0.1 millimol of these salts to each ml. of peroxide.

Hydrogen Peroxide can be stabilized by the addition of certain agents, such as sulfuric acid. Urea, however, seems to be the most effective and satisfactory, although antipyrine serves almost as well.