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DMSO IN THE TREATMENT OF DUPUYTREN'S CONTRACTURE

A Therapeutic Experiment

By

U. VUOPALA and W. J. KAIPAINEN

Summary: 23 patients who had had Dupuytren's contracture for over five years had 80 % DMSO lotion applied topically three times daily for one month. Clinically significant improvement was not noted. Four patients had a typical taste in the mouth. Other side-effects were not noted.

It has been noted that DMSO dissolves pathological collagen, but leaves normal collagen intact (3). Good clinical results have been obtained when keloids, scar tissues, fibrositides, periarthritides, scleroderma, etc. have been treated with DMSO (1—3). For this reason we decided to try a potent concentration of DMSO on Dupuytren's contractures of different degrees. It has been noted earlier that DMSO solutions with concentrations ranging from 50 to 90 percent have approximately the same effect (2).

MATERIAL AND METHODS

23 outpatients who had Dupuytren's contractures of different degrees either in both hands or in one hand, generally in the palmar aponeurosis of the V, but also of the IV finger. At the beginning of the treatment, the distance between the top of the nail (cut) of the damaged

finger and the linea cephalica of the palm was measured when the finger was in maximal extension. 80 % DMSO lotion was applied to the point of contracture three times daily for a period of one month. After this the distance was re-measured in a similar manner, and if there was an increase of flexion, it was interpreted as a positive result; changes of less than 5 mm. were not taken into account.

RESULTS

In none of the patients did the flexion of the damaged finger change significantly. They had all had the contracture for at least five years, some had had it for over 10 years. The results were somewhat better in the patients who had had the contracture for a shorter time, but in all cases the increase of extension was less than 5 mm. This 5 mm. limit was chosen arbitrarily, mainly with a view to estimating the practical significance. Four patients had a taste in the mouth as a side-effect.

DISCUSSION

In treating acute musculoskeletal damages DMSO has been used successfully, but enough information is not available concerning chronic damages. In the present study it has been indicated that potent 80 % DMSO applied three times daily over one month is ineffective. In most of these cases an operation was necessary. There seemed, however, to be a slight suggestion that the effect was the better, the more recent the change was. It must also be noted that when the ointment was applied, the patients themselves became actively interested in the state of the damaged finger and tried to bend and exercise it, and that this physiotherapy may consequently have affected the results. It is necessary to use the 5 mm. limit at least as a practical measure when evaluating the therapeutic effect.

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