

## VITAMIN E THERAPY IN DUPUYTREN'S CONTRACTURE

### Examination of the Claim that Vitamin Therapy is Successful

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It has been claimed that striking success can be gained in the treatment of Dupuytren's contracture of the palmar fascia by simple oral administration of vitamin E in high dosage. It has been said that, after such treatment, thickening of the fascia disappears and contracture of the fingers is relieved. Le Roy Steinberg (1947) used daily doses of 300 mg. of mixed natural tocopherols (of which 60 per cent. is in the form of alpha-tocopherol) for a few weeks until maximal effect was gained. A daily maintenance dose of 1 mg. per kilo of body weight was continued thereafter.

Such a claim of success from so simple a treatment warranted careful investigation and a trial series of thirteen patients was studied in the Orthopaedic and Accident Department of the London Hospital. The routine dosage was 100 mg. of pure synthetic alpha-tocopherol, three times a day, given in the form of Roche "Ephynal Forte" 20 mg. tablets. The aim was to continue treatment for about three weeks, or "until maximal improvement had been gained," and thereafter to give a smaller maintenance dose. In seven patients we succeeded in giving heavy doses for periods ranging from four to eight weeks; in four the treatment was abandoned during the third week; and in two it was abandoned during the first few days.

Four patients complained of headache, nausea, fatigue, drowsiness, "singing-in-the-ears," "swelling of the tongue," giddiness, blurred vision, sweating, and other symptoms that made it impossible to continue. The other nine patients made no such complaints, and four of them were quite sure that they had gained improvement. One, with a moderate degree of contracture, said: "the band feels softer." Another, with deformity of moderate degree, said: "the fingers feel straighter and the aching pain has gone." Two others had severe deformity and both insisted that "there is improvement" but were unable to specify the nature of the improvement.

The effects were checked in every case by detailed clinical records, accurate measurement of deformity, and serial clinical photographs. In twelve of the thirteen patients there was no evidence whatever of any alteration. In one, with moderate deformity, we think that after the second week of treatment the finger was somewhat straighter and the palmar thickening somewhat softer. Review one year later (after five weeks of full dosage and three weeks of maintenance dosage) shows that he still has moderate deformity. In the other twelve, including those treated on full dosage for six to eight weeks (at a cost of £5 a week), we can see no change. The treatment has been abandoned.

#### REFERENCE

STEINBERG, C. LE ROY (1947): "Fibrositis, including Dupuytren's Contracture—A New Method of Treatment." *New York State Journal of Medicine*, **47**, 1679.