these 14 felt severely hungry when on placebo only, whereas two felt severely hungry only when on durophet-M.

5. The significance of these findings is discussed and recommendations made on the treatment of obesity in general practice.

# Acknowledgement

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# A COMPARISON OF THE THERAPEUTIC EFFECT OF THE INTRA-ARTICULAR INJECTION OF TWO LONG-ACTING STEROID COMPOUNDS ON DEGENERATIVE JOINTS

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IN A PREVIOUS PAPER the writer attempted to compare the value of prednisone trimethylacetate (ultracortenol, Ciba) and hydrocortisone in degenerative joint disease. The former was shown to be more effective than the latter.

The present paper is the result of a clinical trial designed to compare the effectiveness of prednisone trimethylacetate (ultracortenol, Ciba) and methyl prednisolone acetate (depomedrone, Upjohn).

The work was done on patients attending the clinic for arthritic patients at Northwood, Pinner and District Hospital. All patients are referred to this clinic by the consultant orthopaedic surgeon or the consultant in

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physical medicine to the hospital. They consist of 19 women and nine men, ages varying from 36 years to 89 years. A total of 53 joints were treated, viz.: 23 hips, 24 knees, two carpometarcarpal joints of thumb, two shoulders and two ankles. Nine patients showed disease in only one joint. The rest had treatment in more than one joint.

There was a case history of trauma in only three patients. Two showed degenerative joint disease following upon rheumatoid arthritis and one claimed to have had a tuberculous hip but this was almost certainly Perthes's disease. Two had capsulitis of the shoulders.

There was no clear relationship to occupation except for one, who, with an arthritic knee had been a roofing carpenter all his life and has to kneel all the time. There were: 17 housewives, three clerical workers, a glazier, picture framer, crane operator (retired), post office engineer, shoe salesman, power station engine fitter (retired), printer (retired), and a lathe operator.

On each occasion when a patient was to be injected, the same substance was used for all joints treated. Two per cent xylotox was used to infiltrate the skin and tissue down as far as the joint capsule. Steroid only was injected into the joint. One ml. of methyl prednisolone (depomedrone) (40 mg.) or 1 ml. prednisone trimethylacetate (ultracortenol) 50 mg. was used for each major joint. For the carpometacarpal joint, approximately 0.2 ml. was used. On each subsequent attendance when treatment was given, the alternative substance was injected. The patient had no idea which was given nor indeed that any form of trial was taking place. At the next attendance the patient was asked:

- 1. If any benefit had resulted, and if so,
  - (a) for how many days
  - (b) any objective improvement; for example ability to walk farther or do any act which had previously been impossible.
  - (c) effect of pain at rest and in bed.
- 2. If no benefit.
- 3. If more pain or less function than before injection.
  - (a) If there was benefit for ten days or more this was assessed as a good result taken in relation to the other answers given.
  - (b) Less than ten days' benefit or none at all.
  - (c) Definitely worse.

The patient was then examined and the range of the joint carefully assessed. Improvement of range was assessed as (a), no change (b), less range (c), more range.

It was only after this objective and subjective assessment had been made that the patient's record card was referred to, the result noted and the nature of the previous injection recalled. This investigation was therefore based on the individual evaluation of 287 injections carried out over the period of one year. On adding up the record of the code used, there was no difference of statistical significance.

Taking each case individually one patient seemed to obtain more lasting benefit with prednisone trimethylacetate: a female aged 76 (both knees). Another, a male aged 81 with a grossly arthritic hip had appreciably more lasting benefit from methyl prednisolone. In no other case was there significant difference.

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The 28 patients treated were assessed as to the value of treatment over the year under review.

Definitely improved .. .. .. .. .. .. .. 13

This included two rheumatoid arthritics who inevitably became less active and two patients with 'frozen shoulder' who in the natural history of the disease should have improved in any case.

No change—i.e. no appreciable deterioration ... 12

This in itself in a progressive degenerative condition may be regarded as a form of success. Two deteriorated and were referred back to the orthopaedic surgeon. One of these has had a most successful Macmurray osteotomy: another is awaiting the same operation. One lady died three months before the completion of the year.

### Summary

An objective and subjective comparison of two steroids, methyl prednisolone and prednisone trimethylacetate, used for the intra-articular injection of 53 joints on 28 patients was made over a period of a year. No significant difference was found in the effects of the two substances injected.

- 13 patients were improved.
- 12 patients were no worse.

Each substance should be regarded as extremely useful in the palliative treatment of joints affected by degeneration or local colloid disease.

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My thanks are due to Mr Vincent Snell, F.R.C.s. and Dr Maurice Hart for their encouragement and for referring patients to me; to Messrs Upjohn for supplies of Depomedrone (Messrs Ciba generously supplied me for my previous work, and were not asked in this case) and to Mrs Wass for her invaluable assistance in running the clinic and for typing this paper, and to the chairman of Harefield-Northwood Group Management Committee for permission to publish.

### PERSONAL POINTS OF VIEW

## MUST WE KILL OUR PATIENTS?

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THE PROBLEM OF THE ELDERLY PATIENT confined to bed and succumbing to disease contracted as a direct result of the recumbency is well known. The principle of keeping patients ambulant whenever