Progressive Systemic Sclerosis (Diffuse Scleroderma)
A FOLLOW-UP REPORT OF TREATMENT WITH POTABA *

W. SILBER, M.B. CH.B. UNIV. CAPE TOWN, F.R.C.S. EDIN., Department of Surgery, AND N. GITLIN, M.B. CH.B. UNIV. CAPE TOWN, M.R.C.P. EDIN., M.R.C.P. LOND., Department of Medicine, Groote Schuur Hospital and University of Cape Town

SUMMARY

The results of a blind trial using Potaba in systemic sclerosis, is reported. The over-all long-term results are depressingly poor and do not correlate with some of the earlier published results.


In 1965 we published a preliminary report about the Potaba (potassium p-aminobenzoate; Glenwood) treatment of 'progressive systemic (diffuse scleroderma)'.

It is pertinent at this stage to indicate the long-term results in 15 unselected cases of diffuse scleroderma treated with prolonged blind therapy as well as 7 cases treated with Potaba alone.

METHOD

The series consisted of 12 females (10 Coloured and 2 White) and 3 males (1 Coloured and 2 White). The ages varied between 18 and 59 years at the time of admission. All patients had progressive systemic sclerosis as evidenced by general, and local examinations and special investigations. The latter included full blood, serum, urine, and radiological studies, cineradiography, and motility studies of the oesophagus, skin biopsy, augmented histamine test and respiratory studies. There were repeated photographs of face, skin and joints. This gave us detailed documentation of all patients' progress over this period.

Treatment Programme

The first case reported by us was given Potaba from the start, but the remaining 15 patients were included in the blind trial, using identical envules of Potaba and placebo (X and Y). These were prescribed in the dose of 6 envules (2 g each) in divided doses per day. The contents were dissolved in water. After 6 months' therapy, the drugs were interchanged, so that each patient had the same period of treatment with X and Y.

In addition to the first case treated with Potaba directly, there were 6 more cases outside the trial, also treated over a prolonged period with the one drug only and using the same dosage regimen.

RESULTS

It was extremely difficult to assess the final results on the basis of the special investigations carried out. The final result, therefore, rested on the patients' subjective impressions plus the assessment of certain of the physical functions, such as the skin elasticity and oesophageal function.

The final assessment of the 15 patients in the blind trial were: with Potaba 2 (13,3%) had good results; 5 (33,3%) had moderate results; and 8 (53,4%) failed to improve. All 15 patients failed to improve with placebo.

However, since the end of the trial, of the 7 (46,6·%) who responded with Potaba, 5 have regressed despite continuation of the drug. This implies that 86,7% have failed after a prolonged course of therapy.

If the extra 7 patients treated with Potaba from the beginning are now included to make a total of 22, the final assessment is: 3 (13,6%) had good results; 5 (22,7%) had moderate results; and 14 (63,7%) failed to improve. The percentage who failed in the whole group over this period was 86,4%.

DISCUSSION

Scleroderma is a chronic progressive disease whose pathogenesis is poorly understood. It has a course which is both variable and unpredictable, and often associated with periods of exacerbation, and sometimes with remission.

The treatment of this disease depends on the stage at which it is seen; but the full-blown case of systemic sclerosis has always proved to be a challenging problem.

In 1950 Zarafonetis et al. using Potaba, reported especially beneficial results. Since then, reports have followed which indicate improvement after long-term Potaba therapy. We reported a single case with subjective improvement, soon after the commencement of Potaba therapy. However, recent evaluations of the drug point out the limitations of its use. Many patients cannot tolerate the full course of 12 g daily which Zarafonetis et al. stated is the only dose which will produce the desired effect.

*Date received: 15 January 1973.
It may produce a temporary, apparently beneficial effect, but is it correct to attribute this to the drug? Is it not possible that these periods of improvement—short or prolonged—are, in fact, periods of remission? The results of the present trial do not substantiate the excellent results which have been claimed in the past.

We wish to thank the patients for being so co-operative in an attempt at 'cure'; Dr J. G. Burger, Medical Superintendent of Groote Schuur Hospital, for permission to publish; and Protea Pharmaceuticals for providing the trial material.

REFERENCES


Prolonged Paresis Following the Administration of Gallamine Triethiodide (Flaxedil) to a Patient With Acute Pancreatitis *

I. LEIBOWITZ, M.B. CH.B. UNIV. CAPE TOWN, D.A. UNIV. RAND., Senior Anaesthetist, J. G. Strijdom Hospital, Johannesburg

SUMMARY

A patient was submitted to laparotomy and found to be suffering from acute pancreatitis. Gallamine triethiodide (Flaxedil) was the main relaxant used. A prolonged paresis lasting 40 hours followed. This was resistant to reversal by atropine and neostigmine, and was precipitated by an associated renal insufficiency with an inability to excrete the gallamine. Prolonged postoperative mechanical ventilation was necessary. Additional aggravating factors were also present. The association of acute pancreatitis and acute renal failure is stressed.


CASE REPORT

A 52-year-old man was admitted to hospital complaining of upper abdominal pain, and vomiting. A history of heavy alcohol consumption over the previous 3 days was given. A tentative diagnosis of acute pancreatitis was made, and blood for serum amylase estimation was taken, but unfortunately the specimen haemolysed. The patient's general condition at the time of admission did not give rise to anxiety. The blood pressure was 130/90 mmHg, the pulse rate was 100/min and the haemoglobin concentration was 18.2 g/100 ml. He was mildly dehydrated and intravenous therapy, including ampicillin and prochlorperazine (Stemetil), was instituted.

The following day the patient's condition deteriorated, vomiting increased and abdominal distension was a feature. A revised diagnosis of acute intestinal obstruction was made. Prolonged postoperative mechanical ventilation was necessary. Additional aggravating factors were also present. The association of acute pancreatitis and acute renal failure is stressed.

*Date received: 15 January 1973.

Anaesthetic Technique

On arrival in the theatre the blood pressure was 110/70 mmHg, and the pulse was 110/min. Atropine 0.6 mg and diazepam (Valium) 2.5 mg were given intravenously. The patient was pre-oxygenated, placed in the reversed Trendelenburg position to obviate possible regurgitation and vomiting, and intubated by use of the 'crash induction' technique. For this thiopentone 200 mg and suxamethonium 50 mg were administered. The patient resumed breathing after 3 minutes. Gallamine 120 mg was used as the main relaxant. Anaesthesia was conducted, using