seen on further ultrasonography and in biopsy specimens. Several treatments were required for each tumour, and injecting alcohol was often associated with considerable pain, whereas our patients did not report pain. These reports did not mention changes seen on ultrasound scans during or immediately after injection, which we found useful in laser treatment.

The most important advantage of the laser is its precision. It is unlikely that it will ever be possible to predict the extent of necrosis around a site at which absolute alcohol has been injected with an accuracy comparable to that already possible with the laser technique.

In conclusion, interstitial laser hyperthermia is feasible and seems to be safe. A multiple fibre system makes it feasible to treat tumours of clinically relevant size in the centre of solid organs. The real challenge for the future will be to develop diagnostic techniques that disclose exactly how far individual tumours extend in a wider range of organs (unlike the well defined tumours treated in this pilot study) and to establish the conditions of laser treatment that give complete tumour ablation with safe healing. This combination of technologies may be valuable for treating otherwise untreatable tumours in a range of solid organs and for the primary treatment of small neoplasms such as tumours of the prostate and adrenal glands.

We thank Mr R C G Russell, Mr P Hawley, Mr W Slack, and the late Professor C G Clark for referring these patients and for permission to report these results. We also thank Dr T N Mills, Mr P Hill, and Miss L A Potter of the department of medical physics for their help. Mr Steger was supported by Living Technology Ltd, Glasgow, and Dr Bown by the special medical development on lasers from the Department of Health and by the Imperial Cancer Research Fund.

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(*Accepted 31 May 1989*)

Effect of homoeopathic treatment on fibrositis (primary fibromyalgia)

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Br Med J 1989;**299**:365-6

In scientific research negative results are often more difficult to interpret than positive ones, as was shown by a clinical trial in which the homoeopathic medicine *Rhus toxicodendron* 6x was compared with a placebo and fenoprofen in the treatment of osteoarthritis. The homoeopathic medicine was found to be ineffective whereas fenoprofen gave an improvement.[1] There were two interpretations: either the effects of homoeopathy are only a placebo effect—that is, a true negative—or the result was a false negative one because of flaws in the design. Another trial had previously suggested that homoeopathy was effective in rheumatoid arthritis.[2]

We designed a trial to clarify these results by overcoming the methodological criticisms while retaining a rigorous design. The main problem in designing clinical trials of homoeopathy is that prescriptions are based on criteria such as the pattern of symptoms as well as the diagnosis. A clinical trial based solely on diagnosis is therefore inappropriate. In a pilot study we had shown that *R toxicodendron* 6c was the most commonly indicated homoeopathic medicine for fibrositis in our patients, being indicated in 42%.

Patients, methods, and results

We used the diagnostic criteria of Yunus *et al* for fibrositis.[3] Only patients with this syndrome, in whom the homoeopathic medicine *R toxicodendron* 6c was positively indicated were entered into the study. Thirty patients meeting the admission criteria were recruited in the rheumatology clinic of this hospital. The clinical characteristics of the patients were similar to those of other reported series regarding age, sex distribution, duration of symptoms, modalities, and number of tender points. The trial was double blind, placebo controlled, and of crossover design. After entry there was no further contact between the homoeopathic doctor and the patient until the treatment was finished. The clinical metrologist dispensed the treatment and performed the assessments and analyses blind. Patients received active treatment and an identical placebo for one month each in random sequence. The dose was two tablets sucked three times daily.

The active preparation was *R toxicodendron* 6c (Boiron) prepared from a tincture of the leaves of poison oak diluted 1:99 in ethanol and then vigorously shaken. This process was repeated six times to give the 6c potency—a dilution of 10^{-12} of the tincture. This was then put up on 125 mg lactose tablets (2% volume per weight). Preparation was as specified in the French national pharmacopoeia. The placebo was identical lactose tablets to which only pharmaceutical ethanol had been added (2% volume per weight). Blind testing of the active and placebo preparations for a battery of drugs yielded negative results. Assessment comprised the number of tender spots, 10 cm visual analogue scales of pain and sleep, and overall assessment. Comparison was made between values at the end of active and placebo treatment periods.

The patients did better in all variables when they took active treatment rather than placebo. The number of tender spots was reduced by about a quarter ($p<0{\cdot}005$). We reduced subjective data to nominal measurements (worse or better). If the null hypothesis were correct the direction of change after placebo and active treatment would be randomly distributed. Analysis showed a significant difference in favour of the homoeopathic medicine (table). Overall assessment also showed a preference for the active treatment, which was not significant.

Assessment of patients with fibrositis after treatment with Rhus toxicodendron (active) and placebo

	Placebo	Active	p Value
Mean No of tender points	14·1	10·6	<0·005*
No of patients with improved pain or sleep (visual analogue scores)	27	53	0·0052†

*Wilcoxon rank sum test. †Paired *t* test.

Comment

Fibrositis (primary fibromyalgia) is a controversial condition but is becoming increasingly accepted.[4] It is difficult to treat. We showed that the homoeopathic medicine *R toxicodendron* 6c was effective for a selected subgroup of patients with fibrositis. The improvement in tenderness, which is the best discriminator of fibrositis,[5] was particularly distinct. The improvement experienced by our patients while receiving active treatment was at least as great as that reported for any other treatment that has been assessed double blind.

We thank Jean Boiron for his advice and encouragement.

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(Accepted 28 April 1989)

Incidence of transient nephrotic syndrome during pregnancy in diabetic women with and without pre-existing microalbuminuria

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Br Med J 1989;**299**:366-7

Considerably different changes in renal protein excretion have been reported in diabetic women during pregnancy.[1,2] In pregnant diabetics with pre-existing macroproteinuria (≥0·5 g protein in 24 hour urine samples) there is often a clear increase in the proteinuria, often resulting in development of the transient nephrotic syndrome.[3,4] In diabetic women with albumin excretion <30 mg/day (normoalbuminuria) or 30-250 mg/day (microalbuminuria) before pregnancy, however, the syndrome is rarely observed during pregnancy. We determined to what extent microalbuminuria (incipient diabetic nephropathy) affects the alterations of renal protein excretion and the variables of kidney function during and after pregnancy and the incidence of the syndrome during pregnancy in these women.

Patients, methods, and results

We investigated seven pregnant women with type I diabetes and pre-existing normoalbuminuria (mean (SD) age 22 (5) years, mean (SD) duration of diabetes 10 (4) years) and seven pregnant type I diabetics with pre-existing microalbuminuria (mean (SD) age 23 (5) years, mean (SD) duration of diabetes 11 (3) years). All women delivered between 36 and 40 weeks' gestation. Before one woman became pregnant, during weeks 12, 24, 28, 32, and 36-40 of pregnancy, and in weeks 4, 12, and 24 after delivery we measured serum creatinine concentration (autoanalyser), creatinine clearance, glycated haemoglobin concentration (Biorad), blood pressure (Riva Rocci), albumin concentration (immunodiffusion), and total protein concentration (Biuret method) in 24 hour urine samples.

In the seven diabetic women with pre-existing normoalbuminuria there was a 5·9-fold increase in albumin and a 5·7-fold increase in total protein excretion in urine during pregnancy. In the seven diabetic women with microalbuminuria we found a 5·9-fold increase in albumin excretion and a 10·0-fold increase in total protein excretion. After delivery the protein excretion fell to the values before pregnancy in all patients. The difference between the absolute increase of proteinuria in the two groups was significant ($p<0·005$, unpaired *t* test). Blood pressure and metabolic control did not differ significantly during pregnancy in both groups (table), and the variables of renal function did not differ between normoalbuminuric and microalbuminuric women. The transient nephrotic syndrome with protein excretion >3 g in 24 hour samples of urine (3·178 g, 4·907 g, and 4·761 g) occurred in three of the seven women with pre-existing microalbuminuria but in none of the seven with pre-existing normoalbuminuria.

Comment

The transient nephrotic syndrome is rare in pregnant diabetics without pre-existing heavy proteinuria and decreased glomerular filtration rate as well as in healthy pregnant women.[1] The extent to which albumin excretion before pregnancy influences the increase in proteinuria and the alterations of the kidney function during pregnancy has not, to our knowledge, been previously investigated in diabetic women.

In our patients with normoalbuminuria the increase in proteinuria during pregnancy remained within the physiological range seen in healthy pregnant women.[4,5] In the diabetic women with pre-existing microalbuminuria the increase in proteinuria during pregnancy was significantly higher. Obviously the glomerular basement membrane develops a greater permeability for protein during pregnancy in diabetic women with pre-existing microalbuminuria in com-

Urinary protein excretion and renal function before, during, and after pregnancy. Values are means (SD)

	Diabetics with normoalbuminuria			Diabetics with microalbuminuria		
	Before pregnancy	Third trimester of pregnancy	24 Weeks after delivery	Before pregnancy	Third trimester of pregnancy	24 Weeks after delivery
Albumin in urine (mg/day)	12 (3)	71 (34)	13 (4)	80 (45)	478 (247)	114 (74)
Total protein in urine (g/day)	0·073 (0·056)	0·417 (0·142)	0·096 (0·073)	0·233 (0·186)	2·353 (1·211)	0·239 (0·107)
Serum creatinine (μmol/l)	79 (13)	68 (10)	85 (7)	71 (15)	63 (9)	79 (13)
Creatinine clearance (ml/s)	1·72 (0·18)	2·07 (0·118)	1·72 (0·17)	1·83 (0·22)	2·12 (0·40)	1·80 (0·28)
Blood pressure (mm Hg)	120 (9)/79 (5)	121 (7)/77 (5)	118 (7)/79 (6)	118 (8)/80 (7)	118 (6)/79 (6)	117 (6)/78 (5)
Glycated haemoglobin (%)	6·2 (1·1)	4·7 (0·8)	6·2 (0·6)	6·8 (0·6)	5·4 (0·5)	6·8 (0·5)