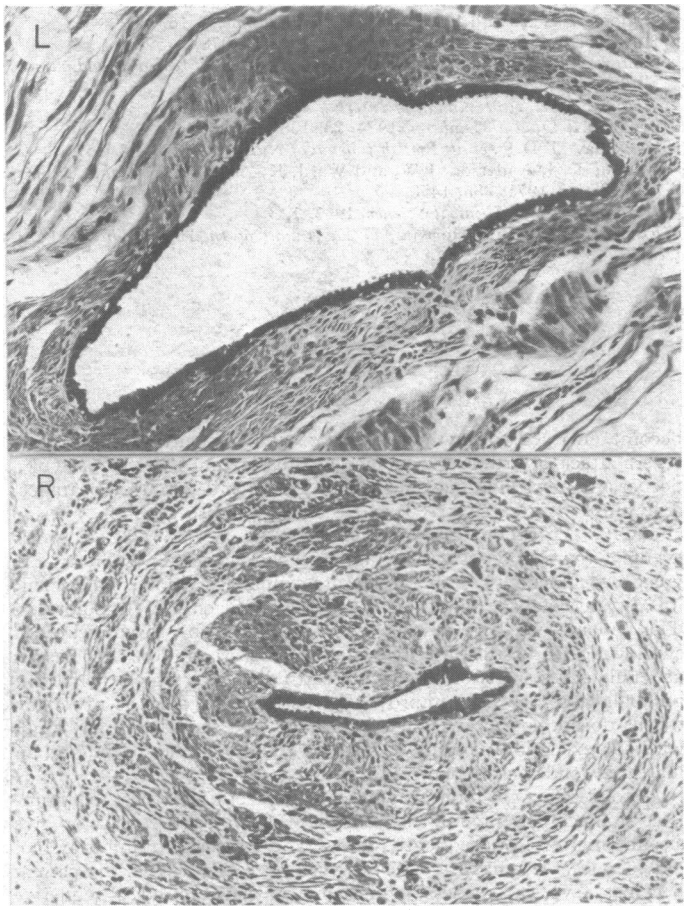
SHORT REPORTS

Failed laparoscopic clip sterilisation

Laparoscopic sterilisation using Hulka-Clemens spring-loaded clips has been used extensively in Britain since the method was described by Hulka *et al*[1] and Lieberman *et al*.[2] We here describe a case in which this technique failed despite correct application of the clips.

Case report

The patient, aged 35, para 3+0, had a vaginal termination of pregnancy at seven weeks and laparoscopic clip sterilisation, one clip being applied to each uterine tube 1 cm from the cornu. Care was taken to ensure that each clip was completely across the tube with the spring rammed home. No part of the round ligament, ovarian ligament, or mesosalpinx was included in the jaws of either clip. Fifteen weeks later the patient was found to be nine weeks pregnant. She had a further vaginal termination of pregnancy and bilateral partial salpingectomy through an abdominal incision. Each clip was completely across its tube but histological examination of each tube showed an oval lumen at the central area of clamping of a minimum diameter of 0·0125 cm on the left side and 0·00125 cm on the right side. There was epithelium lining each lumen but no plicae (figure). Several sections were taken from each tube and in each the lumen was continuous with the lumen of the uncrushed parts, so that no part of either tube had been completely occluded.



Photomicrograph of transverse section through mid-point of crushed segment of each tube. ×315 (original magnification).

Comment

A fertilised human ovum at the four-cell stage, the stage of development at which it passes through the isthmic portion of the tube, is 0·013 cm in diameter.[3] It might therefore be able to pass through a lumen of 0·0125 cm, especially as there was probably some shrinkage of the lumen during preparation of the specimen. Each lumen was clearly wide enough to allow the passage of spermatozoa. We therefore wonder whether patients who have had a laparoscopic clip sterilisation may be prone to ectopic pregnancies. Such a case has been recently described.[4] Laparoscopic clip sterilisation is clearly safer than laparoscopic tubal electrocoagulation, but to minimise the overall failure rate the clips should probably not be applied at the same time as terminating a pregnancy. The uterine tubes are more difficult to find when the uterus is bulky and more oedematous than in the non-pregnant state. It is more difficult to place the clip completely across the tube, and more difficult to ensure that it is applied at a right angle to the long axis. Apparently even when the clips are correctly applied the uterine tubes are not always completely occluded.

[1] Hulka, J F, *et al*, *American Journal of Obstetrics and Gynecology*, 1973, **116,** 715.
[2] Lieberman, B A, Bostock, J F, and Anderson, M C, *British Journal of Obstetrics and Gynaecology*, 1974, **81,** 921.
[3] Jeffcoate, T N A, *Principles of Gynaecology*, 4th edn, p 101. London, Butterworth, 1975.
[4] Clarke, G A, Letchworth, A T, and Anderson, M C, *British Medical Journal*, 1979, **1,** 659.

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Effects of the media on attitudes to electric convulsion therapy

Some doctors are afraid that the increase in media coverage of electric convulsion therapy (ECT)[1] might adversely affect patients' attitudes to what many consider to be an effective treatment.[2] In this study I assessed these effects on patients treated with ECT soon after maximum media coverage; I also gained other information about patients' knowledge and fears of ECT.

Patients, methods, and results

I interviewed all patients who had ECT between December 1977 and April 1978 at one hospital (Barrow Hospital, Bristol). Three patients were unable to complete the interview. Thirty patients remained (11 men, 19 women, age range 31-86); 28 were depressed and two schizophrenic. Eighteen had had ECT before. A partially structured interview was held with each patient on the day before they were to start ECT but after they had given consent. To avoid any change in the normal procedure, medical staff were not informed of the interview.

Most patients (26/30) felt satisfied about why they were having ECT, although four did not. The hospital doctor was the main source of information for 21 patients and mentioned by 25. Ten patients mentioned other patients and one mentioned nurses as a source of information. All patients knew that they would have an anaesthetic; 18 knew that they would have an electric shock, and nine that they would have a seizure. Fourteen had some idea of the duration of the anaesthetic (3-10 minutes): estimates ranged from four seconds to four hours. The aspect most commonly feared was the anaesthetic: 15 mentioned this and 12 feared this most. Personality change was feared by 10, memory loss by six, and dying by five. Six did not feel fearful.

Eleven patients were aware of publicity about ECT. Only one person felt that her attitude towards ECT had been affected by this; she was also the only person who felt that the publicity was exaggerated. The table compares those aware of publicity with those not aware. The two groups did not differ in age, sex, social class, education, or experience of ECT. There were no significant differences between those who had had experience and those who had not in knowledge of or fears about the procedure.

Comparison of knowledge and aspects feared of electric convulsion therapy in patients aware and patients not aware of media publicity

	Patients aware of publicity (n = 11)	Patients not aware of publicity (n = 19)	All patients (n = 30)
Knowledge of procedure:			
Anaesthetic	11	19	30
Duration	6	9	15
Shock	10	8*	18
Convulsion	8	1***	9
All the above	6	1**	7
Aspects feared:			
Anaesthetic	7	8	15
Personality change	5	6	11
Dying	2	3	5
Memory deficit	3	3	6
Not fearful	3	3	6

Significance of difference: *P < 0·05; **P < 0·01; ***P < 0·001 (by Fisher's exact test).

Comment

Despite having consented to ECT, a patient often has limited knowledge of the procedure. Doctors are, perhaps, reticent about telling patients the details; these results, however, suggest that increased knowledge does not necessarily increase fear. Spending time allaying fears about the anaesthetic would seem fruitful, since this was the most commonly feared aspect. One-third of patients mentioned other patients as a source of information, and, although this proportion is not as high as in an American study,[3] it points to the importance of the ward subculture.

Those patients aware of the publicity had a significantly increased knowledge of ECT, other than its duration. There was, however, only a slight, non-significant increase in the proportion fearing each aspect and no difference in the order of aspects feared. Only one patient regarded herself as affected by the publicity. The figures are closely similar to those of Gomez[4] derived before the publicity—further evidence of lack of effect.

These results suggest that the concern of the medical profession was not justified, even though a television programme "is conceived primarily as journalism and only secondarily as a public service."[5] The media must, however, be aware of their responsibilities in relation to ECT.

I thank Dr David Whitwell for encouragement and guidance.

[1] Mounter, J, *The Listener*, 21 July 1977, p 67.
[2] The Royal College of Psychiatrists, *British Journal of Psychiatry*, 1977, **131**, 261.
[3] Hillard, J R, and Folger, R, *Journal of Clinical Psychology*, 1977, **3**, 855.
[4] Gomez, J, *British Journal of Psychiatry*, 1975, **127**, 609.
[5] Goodchild, P, *Sexually Transmitted Diseases*, ed R D Catterall and C S Nicol, p 246. London, Academic Press, 1976.

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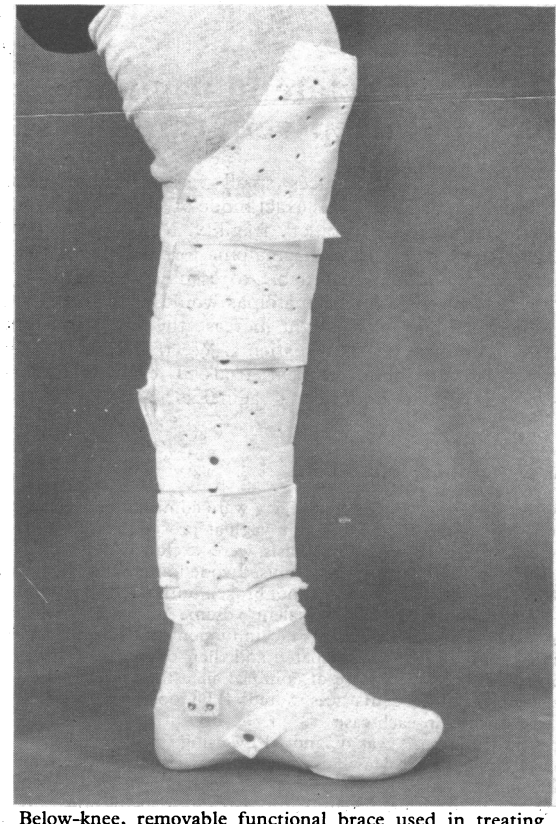
Pathological fracture of tibia in patient with corticosteroid-dependent psoriasis treated by functional bracing

Conventional plaster-of-Paris splinting of limb fractures may be undesirable in patients with psoriasis. Sudden withdrawal of treatment in cases held in remission by a topical corticosteroid may lead to a rebound effect and a more severe erythrodermic or pustular psoriasis. Internal fixation of the fracture is unacceptable because of the high risk of infection. We present a case of pathological fracture of an osteoporotic tibia in a patient with longstanding psoriasis controlled by topical corticosteroids. Treatment consisted of primary functional bracing with a removable appliance.

Case report

A 50-year-old man had developed generalised psoriasis 25 years previously after a persisting polyarthropathy. The psoriasis responded only to continued applications of topical corticosteroids (betamethasone valerate 50%). He was intolerant of methotrexate and systemic corticosteroids, and 20 years of topical corticosteroid application had resulted in fragile, atrophic skin. He presented five weeks after a trivial fall causing bruising to his left lower leg. Weight bearing had been painful since injury. Radiographs showed a stress fracture of the anterior cortex of the mid-shaft of the left tibia and an undisplaced transverse fracture of the distal tibia and fibula in the same limb. The bones were severely osteoporotic, accounting for the fractures resulting from relatively minor trauma. The skin of the fractured limb was extensively affected by psoriasis.

He was treated with a below-knee functional brace made of light-weight perforated thermoplastic material (Orthoplast, Johnson and Johnson) and incorporating a plastic heel-cup and ankle-hinge (figure). Thus a full range



Below-knee, removable functional brace used in treating pathological fracture of tibia in patient with psoriasis.

of movement of the knee and ankle was possible while angulation and rotatory forces acting at the fracture were fully controlled. The brace was applied over a layer of stockinet to protect the fragile skin. The calf seam was not sealed and thus could be removed to apply topical corticosteroids. Straps were provided for fixation and adjustment. Walking, initially with crutches, was started immediately allowing as much weight on the fractured leg as could be tolerated comfortably. After 11 weeks the fracture was clinically united and the brace was worn only when walking out of doors. Radiographs 14 weeks after injury showed profuse callus formation. The brace was then discarded. The psoriasis remained well controlled throughout, and the joints of the affected limb showed no increase in stiffness despite the psoriatic arthropathy. The patient has since presented with a hairline fracture of his other osteoporotic tibia. This is being treated with a similar brace.

Comment

Functional bracing is being used increasingly in treating tibial fractures, usually after a short period of plaster immobilisation.[1] The average time to bony union is 15 weeks.[2] The aetiology of the fracture in our case is not proved, but since quite potent corticosteroids had been applied over a period of 20 years systemic absorption through abnormal skin probably caused the osteoporosis. Functional bracing with a removable appliance was particularly suitable in this case because it enabled corticosteroid to be applied to the skin. Severe,