Clinical Problems

Self-inflicted Injury: A Follow-up Study of 43 Patients

IAN SNEDDON, JOAN SNEDDON

British Medical Journal, 1975, 3, 527-530

Summary

Forty-three patients, 38 women and 5 men, with self-inflicted skin lesions were studied. Thirty-three were followed up for up to 22 years. In most cases dermatitis artefacta was only one incident in a long history of psychogenic illness. Of the 43 patients, 13 (30%), 12 women and one man, continued to produce lesions or were disabled with other psychiatric disorders more than 12 years after the onset of symptoms. Prognosis was difficult but recovery seemed to occur when the patient's life circumstances changed rather than as a result of treatment.

Introduction

Skin disease is never simple to treat even when the patient wishes to recover. It becomes far more difficult when the patient (usually female) deliberately manufactures lesions. Such patients present a double challenge—that of diagnosis, and that of management, since once detected they usually refuse to discuss the underlying problem and cease to attend. As early as 1907, Towle[1] described 49 cases of gangrena cutis hysterica, and in 1917 Simpson[2] pointed out the need to recognize such lesions in young girls. The shape of artefact lesions is usually bizarre[3]; they have linear or geometric outlines, and superficial necrosis is common. The handedness of the patients is a factor determining the sites of the lesions. Many patients have a "Mona-Lisa-like" expression of artful innocence.[4] Lyell[5] reviewed the whole problem of the diagnosis of self-inflicted disease.

Though much has been written about the diagnosis few attempts have been made to discover the ultimate fate of the patients. McCormack[6] sent a questionnaire to 10 patients but only five replied, this being too few to allow any definite conclusion. He suggested, however, that the rarity of the condition after the age of 25 indicated that it did not persist. Seville[7] recorded nine cases, in all but one of which the patients appeared to recover.

Relatively little has been written on the subject by psychiatrists, possibly because since patients wish to remain ill, patients often refuse psychiatric help or appear to comply and then fail to keep appointments with the psychiatrist. Hawkings *et al.*,[8] however, studied 19 patients with simulated disease, not all dermatitis artefacta, and concluded that it is a self-righting condition with a close similarity to anorexia nervosa. Our experience resembles that of Battle and Pollitt,[9] who described six patients, three of whom continued to produce fresh lesions for over 20 years despite plastic surgery and psychotherapy. We have studied 43 patients and succeeded in following up 33 of them for up to 22 years.

Rupert Hallam Department of Dermatology, Hallamshire Hospital, Sheffield S10 J2F

IAN SNEDDON, M.B., F.R.C.P., Consultant Dermatologist

The Royal Hospital, Sheffield S1 3SR

JOAN SNEDDON, M.D., Senior Casualty Officer (Now Lecturer in Psychiatry, University of Sheffield)

Findings

The details of the patients are given in the table; 14 of the 38 women and three of the five men were married. Zaidens[10] believed that dermatitis artefacta is a disease of middle age, but in our experience it is very much a disorder of young women. The different types of artefacts and the numbers of cases in which they were found were as follows: excoriations, linear or square, 25; heat, acid, or alkaline burns 6; bruising 4; nail piercing 3; rubber bands 2; ligatures round hands and legs 2; and conjunctivitis 1. In some cases the lesion was trivial; in fact, in case 7 it could be removed with ether. Few of our patients, unlike those of Hawkings *et al.*,[8] worked in hospitals. In case 24 the patient, an occupational therapist, produced a skilful imitation of psoriasis (fig. 1) by means of a corrosive which would have remained undetected but for an accident when the corrosive trickled down her forearm, leaving a tell-tale straight line. One can also

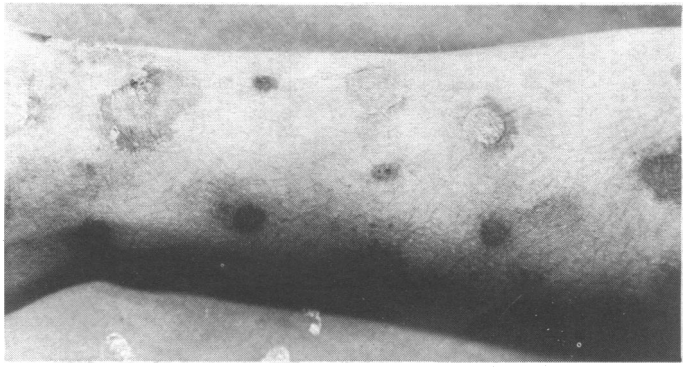

FIG. 1—Case 24. Appearances of lesion simulating psoriasis.

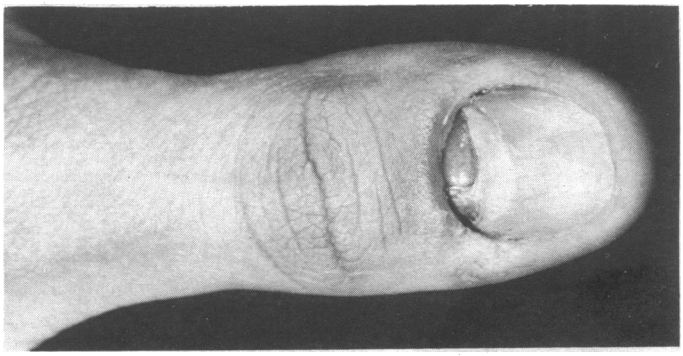

FIG. 2—Case 32. Granulomatous appearance of lesion above cuticle.

Details of Cases Studied

Case No.	Sex	Marital State	Age when First Seen (Years)	Duration of Symptoms	Type of Lesion	Possible Related Factors	Duration of Follow-up	Present State
1	F.	Single	18	2 years	Oedema of hand due to ligature round wrist	Over-anxious, dominant mother	5 Years	Recovered after 3 years
2	F.	Single	55	3 Weeks	Linear excoriations	Stutters badly. Solitary existence	13 Years	Still producing artefact lesions
3	F.	Single	14	1 Year	Linear excoriations	Drug eruption 6 months previously. Dominant mother suffers from mental illness	13 Years	Recovered after 1 year Well
4	F.	Single	20	6 Years	Linear excoriations			Untraced
5	M.	Married	47	4 Years	Scarred alopecia	Receiving war pension for nerves	13 Years	Recovered. Well
6	F.	Single	18	3 Months	Possible acid burn of face	Dominant, rigid, and strict stepmother		Untraced
7	F.	Single	18	3 Months	Rash on face removable by solvent	Mother aggressive. Patient had weakness of legs 2 years previously		Untraced
8	F.	Single	15		Blister on face			Untraced
9	F.	Single	9	6 Months	Facial scratches		11 Years	Cleared rapidly. Still clear
10	F.	Single	25	6 Months	Necrotic lesions of legs suggestive of alkaline burns	Failed exams on nursing and lost religious faith	10 Years	Possibly epileptic with diabetes insipidus
11	F.	Single	18	1 Month	Linear lesion of face	Laboratory technician, jealous of sister	11 Years	Well. Married with 1 child
12	M.	Married	41	6 Months	Sewlling of leg caused by ligature	Marital quarrels. Wife refused to share bed so long as leg was bad	6 Months	Untraced
13	F.	Single	27	12 Years	Cheilitis and conjunctivitis	Recurrent soreness of eyes since aged 7. Police charge for changing prescriptions. Unsubstantiated history of being raped by Sunday-school teacher at 12 years	12 Years	Blind, disabled
14	M.	Single	14	3 Months	Blister on leg		2 Years	Well
15	F.	Single	15	1 Week	Linear scratches	Quarrelled with boyfriend		Untraced
16	F.	Married	31	3 Months	Linear erosions for 3 years	Recurrent depression	9 Years	Healed after 3 years when moved house
17	M.	Single	19	1 Year	Square erosions of face	Jealous of older brother	9 Years	Happily married. No further lesions
18	F.	Married	39	3 Months	Burn blisters		4 Years	Healed for past 3 years
19	F.	Married	19	1 Month	Bruising left thigh	Under psychiatric care for episodes of pseudo-coma and recurrent abdominal pain since age 15	3 Years	Hysterical episodes, pain, and pseudocoma
20	F.	Married	55	4 Months	Ulceration of breast	Recurrent abdominal pain, hysterical coma, and depression. Several attempts at self-poisoning	15 Years	Depressed and hearing voices
21	F.	Single	16	7 Days	Linear excoriations of face	Depression and repeated suicidal attempts followed by anorexia nervosa	6 Years	Skin clear. Working. Still under psychiatric care for depression
22	F.	Single	20		Crush injury to left hand. Recurrent bruising of left hand. Frequent linear cuts elsewhere	Hysterical aphonia. Admission for overdose on several occasions. Falling attacks, not true epilepsy. Dominant mother	22 Years	Unable to work. Walks with a stick
23	F.	Married	24	1 Year	Linear excoriations on hands	Recurrent hospital admission for abdominal pain. Laparotomy 1970, no abnormality found. Eight children by husband with Huntingdon's chorea	13 Years	Still producing artefacts
24	F.	Married	21	2 Months	Superficial chemical burns	Occupational therapist in mental hospital. Was divorcing husband at onset. Recurrence of eruption during divorce hearing	5 Years	Well, happily remarried
25	F.	Married	43	3 Years	Recurrent bruising of limbs. No haematological abnormality or autoerythrocyte sensitivity	Onset at death of mother. Has care of incontinent adult brother. Attacks of depression. Exacerbation on death of husband 1 year ago	7 Years	Continues to bruise
26	F.	Married	54	3 Years	Rash on knee after trivial injury at work	Coincided with mother's death, her divorce, and brother's suicide	9 Years	Well
27	F.	Single	10	3 Weeks	Linear excoriations of face	Coincided with father running away to S. America. Youngest of 6 children. Shy and insecure	7 Years	Unmarried, pregnant
28	F.	Single	16	2 Months	Traumatic lesions of finger nails	None found	3 Months	Untraced recently
29	F.	Single	14		Produced skin lesion while in hospital after lobectomy for bronchitis. Excoriations, failure of wounds to heal	Broken home. Said to have been sexually assaulted at 16. Hysterical paraplegia and retention of urine. Persistent back pain. Artificial pyrexia and haemoptysis	17 Years	Recovered after 14 years when she married. Now has two children
30	F.	Married	81	Unknown	Forgotten rubber band round leg	Senile dementia		Healed
31	F.	Married	29	4 Months	Superficial blisters and black streaks—? silver nitrate	Inadequate personality, low intelligence. Sullen and unco-operative. Refused psychiatric help	7 Years	Mild depressive state. Continues to have artefact
32	F.	Single	12	1 Year	Nail damage above cuticle	None known	6 Months	Untraced. Nails recovered during 6 months
33	F.	Married	49	2 Years	Bruises on thighs	None known	3 Months	Recovered in 3 months. Untraced
34	F.	Single	18	6 Months	Nail damage above cuticle	Dominant mother	6 Years	Recovered after marriage on leaving home
35	F.	Married	41	6 Months	Excoriation of left shin	Mentally subnormal	11 Years	One recurrence but now healed

Case No.	Sex	Marital State	Age when First Seen (Years)	Duration of Symptoms	Type of Lesion	Possible Related Factors	Duration of Follow-up	Present State
36	F.	Single	12	3 Months	Bruised hand	Unable to keep up with others at school		Untraced
37	F.	Single	17	1 Day	Linear facial excoriations. Burns on fingers	Unhappy, came from broken home	1 Month	Untraced
38	F.	Married	80	2 Weeks	Rubber band under wedding ring	No reason found. Forgetfulness?	4 Weeks	Recovered
39	F.	Single	20	3 Months	Superficial abrasions. Dental burr hole in forearm. Artefact ulcer in mouth	Recurrent falling attacks treated by psychiatrist for 4 years before skin lesions appeared. Dominant mother and alcoholic father	2 Years	Still producing lesions
40	F.	Married	30	2 Years	Excoriated nose	Anorexia nervosa at 20 years. Active lesbian before marriage. Sleeps in chair downstairs to avoid sharing bed with husband	8 Years	Continues to produce artefacts despite 8 years of psychotherapy
41	F.	Single	12	10 Days	Superficial linear blisters, possibly from corrosive.	Lifelong bed wetter. Shy of getting undressed. Avoided P.T. as long as she had skin lesion	5 Years	Well
42	M.	Married	55	20 Years	Extensive ulcer of left side of face and neck recurring for 20 years. Started after trivial burn	Depression; 10 years of psychiatric care	7 Years	Healed for 3 months. Working
43	F.	Single	19	1½ Years	Bruise on left leg after twisting ankle. Unable to walk and attend college	Dominant and anxious mother. Leg in plaster under care of orthopaedic surgeon for 18 months	6 Months	Well and back at college

be easily misled by young girls who produce a granuloma of the nail bed, probably by piercing the nail with a heated needle. In cases 28, 32, and 34, all of young girls at different schools, identical lesions were produced (fig. 2), suggesting some common source of information. Though two patients (cases 1 and 12) deliberately applied bandages around their limbs to make them swell, the rubber-band injuries in the two old ladies (cases 30 and 38) were produced by forgetfulness. We have excluded patients with neurotic and acne excoriations from our series.

Prognosis

Of the 43 patients, 33 were traced. Details of their progress were obtained from hospital notes and information on their present state was derived from personal knowledge or family doctors. Several of the young patients clearly used an artefact to draw attention to their particular problem, and when that was solved they recovered —for example, cases 3, 11, 17, and 41. In most cases, however, the artefact was only one incident in a long history of psychogenic illness and was often accompanied by abdominal pain, episodes of pseudocoma, self-poisoning, or depression.

Twelve women and one man continued to produce lesions or were severely disabled in other ways an average of 12·4 years after the onset of symptoms. Twenty were known to have recovered. Even if the 10 who were untraced are assumed to be well, this means that 30% of all our patients with self-inflicted lesions failed to recover, which is a much poorer prognosis than previous surveys have suggested. The difficulty of giving a prognosis is illustrated by the following two case histories. The first patient recovered; the second did not.

Case 29—At the age of 14 this girl, already a problem child from a broken home, underwent a lobectomy for bronchiectasis. Before leaving hospital she developed an artefact skin lesion. She also had unexplained fever. Two years later her normal appendix was removed at another hospital to cure abdominal pain; the wound broke down, however, and she was seen by a psychiatrist. She then went to live with an aunt in the south of England. She claimed that at the age of 16 she was sexually assaulted, but there was no proof of this. At age 18 she returned to Sheffield and became a trainee nurse. Soon after her training began she was admitted for investigation of haemoptysis, but no cause was found, and while on the ward developed lesions on her legs (fig. 3). These healed under occlusive dressings but it was noticed that her oral temperature was raised, and this occurred even when the nurse stood by and watched. On every occasion that her oral temperature was raised her rectal temperature was normal. How she raised the mercury thermometer remained a mystery. She refused to talk to a psychiatrist. Shortly after resuming her nursing duties she fell and her legs became paralysed and she developed retention of urine. Despite her history myelography was carried out to exclude a spinal tumour. None was found. A psychiatrist was again called and she was detained in a mental hospital on a compulsory order. There she demanded her clothes, recovered the function of her legs and bladder, and was discharged after three days. She continued to complain of pain in her back and was given a plaster jacket at a nearby hospital. At the age of 28, after 14 years of continuous invalidism, she married and subsequently had two children. She has not consulted her doctor for two years and is known to be well.

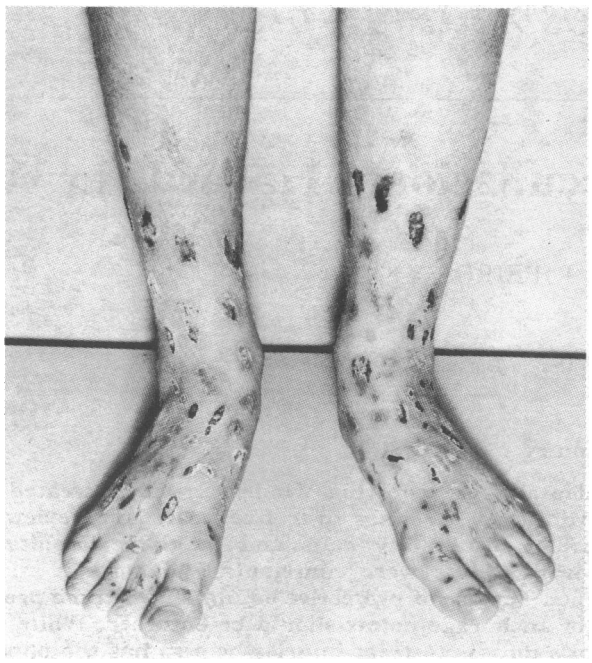

FIG. 3—Case 29. Characteristic linear superficial abrasions.

Case 22—A 20-year-old woman sustained a minor crush injury to her left hand when working in a canning factory. A blue swelling appeared on the back of the hand, though this subsided when the hand was occluded in plaster. It was soon suspected that a haematoma artefact was responsible and, much against her mother's wishes, she was seen by several psychiatrists and a neurologist. After five years the back of the hand was still troubling her. The area was explored by an orthopaedic surgeon. For a short time she resumed work but soon cut a finger on her right hand, which would not heal. She was then seen in the skin department, and when the wound healed under an occlusive dressing she developed hysterical aphonia. She was interviewed by a medical social worker, who felt that the patient's mother dominated her and that any attempt to refer her for psychotherapy would be resisted. Her mother died at that time, and the following year, when 31, the patient was admitted with an overdose of barbiturates, and a hysterical personality was diagnosed. She subsequently attended the psychiatric department for 11 years, during which she learnt to dislocate

her patella and now walks with a stick. She had occasional fit-like attacks but electroencephalography showed no evidence of epilepsy. She was registered as disabled, a total invalid with a 21-year history.

Comment

These patients present a considerable problem. They are not deliberate malingerers, nor are they psychopaths with Münchausen's syndrome. We agree with Hawkings *et al.*[8] that there are similarities between these patients and those with anorexia nervosa, in that the condition affects particularly young girls who have immature personalities; however, of the 13 patients who failed to recover, four of the 12 women were married and three were over the age of 40 at the onset of symptoms, and there was one man of 27.

In the management of these patients one cannot better Lyell's[5] dictum that one has to indicate indirectly that you know of their activities but sympathize. They should be given an opportunity to talk but many do not do so. Direct confrontation with the patient or relatives leads to the patient ceasing to attend. Though isolation and failure to communicate makes them difficult to help, we have recently obtained slightly more encouraging results from relaxing exercises taught by a clinical psychologist. It must be admitted that essentially the patients who have recovered have done so when they have matured or when their life situation has changed and not as a result of medical intervention.

We are grateful to Dr. R. E. Church for allowing us to include his patients in the study. We thank all those family doctors who so kindly and efficiently supplied up-to-date information on their patients, and the numerous medical social workers for the hours spent on interviews. We are indebted to Miss Morag Melvyn for her help with the psychological management of several patients, and to Dr. Lawton Tonge for his psychiatric assessments and advice. We should also like to thank Miss Wendy Spencer, of the photographic department.

References

1 Towle, H. P., *Journal of Cutaneous Diseases*, 1907, 25, 477.
2 Simpson, C. A., *Journal of Cutaneous Diseases*, 1917, 35, 493.
3 Stokes, J. H., and Garner, V. C., *Journal of the American Medical Association*, 1929, 93, 438.
4 O'Donovan, W. J., *Dermatological Neuroses*. London, Kegan Paul, 1927.
5 Lyell, A., *Scottish Medical Journal*, 1972, 17, 187.
6 McCormack, H., *British Journal of Dermatology and Syphilis*, 1926, 38, 371.
7 Kitchen, I. D., McGibbon, C., and Seville, R. H., *British Medical Journal*, 1967, 2, 218.
8 Hawkings, J. R., *et al.*, *British Medical Journal*, 1956, 1, 361.
9 Battle, R. J. V., and Pollitt, J. D., *British Journal of Plastic Surgery*, 1964, 17, 400.
10 Zaidens, S. H., *Journal of Nervous and Mental Disease*, 1951, 113, 395.

Hospital Topics

Occupational Hazards in Window Cleaning

B. F. RIBEIRO

British Medical Journal, 1975, 3, 530-532

Summary

Accidental falls involving window cleaners treated at the Middlesex Hospital over five years are reviewed. Failure to use safety belts and the lack of suitable anchorage points were contributary factors in all 20 patients. The use of protective equipment and the provision of anchorage points should be enforced. While the doctor's duty is to treat injuries he also has the opportunity to draw attention to their prevention.

Introduction

During six months in 1972 as an accident officer at the Middlesex Hospital I treated seven window cleaners who had been injured by falls. Four were permanently disabled and unable to return to their occupation. In view of the disabilities produced by the injuries and to review the safety standards used by window cleaners I undertook a retrospective survey of a further 13 patients with similar injuries presenting during 1967-72.

Department of Surgical Studies, Middlesex Hospital, London W1N 8AA
B. F. RIBEIRO, M.B., F.R.C.S., Surgical Registrar

Types of Injuries

All the injuries resulted from falls from ladders or window sills and the patients fell into two groups: group 1 consisted of nine patients with minor fractures or soft tissue injuries requiring outpatient treatment, and group 2 consisted of 11 patients with multiple injuries, who were all admitted to hospital; four required emergency surgery. Falls from heights below 6·1 m (20 ft) produced relatively minor injuries to the arms in seven of the nine patients in group 1, while falls from greater heights produced multiple injuries to the legs or trunk in 10 of the 11 patients in group 2 (see table). In the arm fractures around the wrist joint predominated. In the leg injuries involving the ankle joint and calcaneum were most common; in three patients the injury was bilateral. In three patients compression fractures of the vertebrae complicated leg fractures. Joint dislocations occurred in four patients and in one (case 15) involved three separate joints. Internal injuries occurred in only one patient and proved fatal (case 20).

Effects of Injury

There were no disabilities reported among the patients in group 1. The most common disability in group 2 resulted from fractures of the calcaneum. When the fracture involved the subtalar joint the resulting