Failure to correct reflux was seen in three ureters, but in all of these reflux was successfully corrected after a second injection of Teflon. Postoperative intravenous pyelography showed no evidence of ureteral obstruction in 18 treated ureters.

Discussion

This study confirms in man our previous experimental findings in the pig that subureteric injection of Teflon eliminates vesicoureteric reflux. Our patients achieved an excellent cure rate after simple endoscopic injection of Teflon paste behind the intravesical ureter. There was no ureteral obstruction in 18 treated ureters.

Polytef paste for injection is a sterile, injectable paste, containing polytef, glycerine, and polysorbate. Polytef is polytetrafluorethylene or Teflon that has been pyrolysed; it is not absorbed but the particles are encapsulated by fibrous tissue with a minimal lymphocytic reaction.⁶ ⁷ The implant achieves a firm consistency and retains its shape and position at the injection site.6

This procedure is well tolerated, avoids open operation, and shortens hospital stay. It might be of particular value in small infants with gross reflux, in whom antireflux surgery has been considered to be too hazardous. Similarly, the results of re-

implantation of the ureters into the neuropathic bladder have been unrewarding. The ureters in our one patient with reflux secondary to a neuropathic bladder were cured of reflux after a single injection of Teflon.

Properly carried out, the procedure corrects vesicoureteric reflux. It takes about 15 minutes, may be done as a day procedure, and avoids open surgery. We call the procedure "The Sting"-that is, subureteric Teflon ingection.

References

- ¹ Hutch JA. Vesico-ureteral reflux in the paraplegic; cause and correction. J Urol 1952;68:457-67.
- ² International Reflux Study Committee. Medical versus surgical treatment of primary vesico-ureteral reflux. *Pediatrics* 1981;67:392-400.
- ³ Politano VA, Leadbetter WF. An operative technique for the correction of vesico-ureteral reflux. J Urol 1958;79:932-41. ⁴ Cohen SJ. Ureterozystoneostomie: eine neue antireflux Technik. Aktuel Urol 1975;6:1-9.
- ¹⁷¹³,0:1-9.
 ⁵ Coleman JW, McGovern JH. A 20 year experience with pediatric ureteral re-implantation: surgical results in 701 children. In: Hodson J, Kincaid-Smith P, eds. *Reflux nephropathy*. New York: Mason Publishing, 1979:299-305.
 ⁶ Puri P, O'Donnell B. Correction of experimentally produced vesicoureteric reflux in the piglet by intravesical injection of Teflon. Br Med J 1984;289: 5-7.

- one JW, Arnold GE. Human larynx injected with Teflon paste. Histologic study of innervation and tissue reaction. Arch Otolaryngol 1967;86:550-61. Stone

(Accepted 29 May 1984)

Violence and psychosis

II—Effect of psychiatric diagnosis on conviction and sentencing of offenders

PAMELA J TAYLOR, JOHN GUNN

Abstract

An examination of the records of all sick and violent men remanded to a large English prison suggested a tendency among police to consider men to be exceptionally dangerous simply because of their mental illness. On further study, however, there was no evidence that the mentally ill were more vulnerable to detention without subsequent conviction than their normal peers. Remand was rarely followed by help for the mentally abnormal men studied; this is disturbing as requests for psychiatric help constitute an important reason for custodial remand. Less than a third of the men with active symptoms went to hospital, although some of the less disturbed received supervision (including probation) orders, occasionally with treatment.

As there is evidence that most of the few mentally abnormal offenders who subsequently receive treatment benefit from it, psychiatrists should do more for offender patients.

Institute of Psychiatry, London SE5 PAMELA J TAYLOR, MRCP, MRCPSYCH, senior lecturer JOHN GUNN, MD, FRCPSYCH, professor

Correspondence to: Dr Pamela I Taylor.

Introduction

Many men held on custodial remand have committed relatively trivial offences, and a substantial minority are never convicted of the offence with which they have been charged. Some, furthermore, are remanded in custody for alleged offences that, if established, cannot lead to a sentence of imprisonment (for example, minor thefts). The high prevalence of psychiatric disorder in a large male remand prison was described in last week's issue (30 June, p 1945-9).1 How does this arise? Are mentally ill people particularly vulnerable to being detained for offences that are subsequently not proven? Is there something about their behaviour that leads them to be seen as potentially threatening and results in their imprisonment, even though they may not have behaved dangerously? There appear to be some substantial differences in the prevalence of psychiatric disorder between remanded and convicted prisoners; the prevalence of psychosis, in particular, among convicted prisoners is relatively low.² ³ Are the mentally ill subsequently excused for their behaviour or are they placed in settings more appropriate to their need for treatment?

Method

A sample of 1241 men who were sick or charged with a violent offence, or both, and entering Brixton prison for the first time were studied by means of a review of case notes, as described in last week's issue (30 June, p 1945-9).¹ They constituted 45% of the total new intake of 2743 men for the four months studied. Information was recorded on a specially developed check list that covered such information as age, current charges, convictions, and sentences, criminal history, psychiatric diagnoses, and previous treatment. Information about conviction and sentencing was usually available from the discipline office at Brixton prison. If this was not so cases were traced to the next prison or through the criminal records office as necessary. Even so, at the end of the study data on conviction had still not been traced for 93 men and data on sentencing for 120 men of the 1241 studied.

An item not previously described is of particular interest. A number of the men entering the prison carried a form that noted whether, in the judgment of the police, they presented a special risk of exhibiting certain kinds of behaviour, like escaping, suicide, or violence directed at other people. The rating by the police of risk of violent behaviour was noted.

Results

POLICE JUDGMENT OF POTENTIAL FOR VIOLENCE AGAINST OTHERS

One hundred and eleven men (9% of the sample studied) were identified by the police as presenting a special risk of exhibiting violent behaviour. For 128 of the 1241 men records indicating such police judgment were not available. As this particular record was generally retained somewhere accessible, even after the main prison files had moved on with the offender, it is unlikely that we missed many such warnings.

The nature of the offence for which a man is arrested might be expected to have a powerful effect on the police, influencing their judgment of the risk of further violence. This was only partly confirmed. Taking all the violent offences together, including offences against property, a violent charge was significantly more likely than not to be associated with police notification of risk ($\chi^2=21\cdot12$, $p<0\cdot0001$) (table I). Men charged with homicide (no distinction was made between the various kinds of criminal homicide) were three times more likely to be graded as a special risk for further violence than those who were not charged with homicide (table II); the difference between the groups was significant ($p<0\cdot0001$). Conversely, those charged

TABLE 1—Judgment by police of special risk for violence in relation to subsequent charge for violence of any kind. Figures are numbers (%) of men

	Charged with non-violent offence alone (such as drugs, drink, vagrancy, stealing)	Charged with violent offence (homicide, other violence, arson, criminal damage, possessing offensive weapor		
No special risk Special risk of violence to others	506 (94)	496 (86)		
violence to others	30 (6)	81 (14)		
Total	536	577		

TABLE II—Police judgment of special risk for violence in relation to some specific
charges. (Categories of offence are not necessarily mutually exclusive)

		No (%) of men judged to be of:				
	No special risk	Special risk for violence	Total		χ²	p value
Homicide:						
Yes	38 (73)	14 (27)	52)	15 50	
No	963 (91)	97 (9)	52 1060	7	15.50	<0.0001
Other personal violence						
Yes	280 (88)	39 (12)	319	٦	0.17	210
No	721 (91)	72 (9)	319 793	5	2.17	NS
Criminal damage:		- (-)				
Yes	138 (84)	26 (16)	164	٦		
No	863 (91)	85 (9)	948	7	6.63	< 0.01
Acquisitive offences:		(-)		,		
Yes	467 (94)	29 (6)	496	٦		
No	534 (87)	82 (13)	616	7	16.22	<0.0001

with acquisitive offences were significantly less likely than those not to be judged dangerous (p < 0.0001). No other category of offence, including charges of personal violence short of homicide, was either negatively or positively associated with police judgments of risk, with one interesting exception—namely, criminal damage. Those charged with this offence were more likely than all other offenders, including those who had been violent to others, to be designated as a special risk for violence (p < 0.01). In four cases the men were concurrently charged with assault, but in the 22 others there were no associated charges of personal violence, although 12 of the men did have histories of mild to moderate personal violence; four of these 12 men were schizophrenic.

Information about previous convictions was not available in over one third of the records, but, as indicated in the accompanying report,¹ the proportion of men identified with previous convictions for violence was the same as that identified when all data were available. As table III shows, a criminal record of violence appeared to contribute substantially to a police rating of risk (p=0.0005) as, to a lesser extent, did a record of damage to property (p<0.02) but not a criminal record in more general terms.

TABLE III—Relation between previous criminal record and police judgment of special risk for violence. (Categories are not mutually exclusive)

	No (%) of to t						
	No special risk	Special risk for violence	Total		X,8	p value	
Record of personal violence:	······						
Yes	171 (81)	39 (19)	210	٦			
No	415 (91)	40 (9)	210 455	<u>ک</u>	12.21	<0.0002	
Record of criminal damage:	()	(-)		1			
Yes	114 (83)	24 (17)	138 484	ſ	5.53	<0.02	
No	437 (90)	47 (10)	484	5	,,,,	~002	
Record of offending of any kind:							
Yes	694 (89)	84 (11)	778 173	ſ	0.14	NS	
No	152 (88)	21 (12)	173	5	0.14	143	

Psychiatric disturbance appeared to cause the police concern. Fifty three (20%) of those men rated as having definite symptoms at the time of committing their offence were thought by the police to pose a special risk of violence to others compared with only 52 (7%) of those who were symptom free; this difference was significant (p < 0.0001). Two hundred and twelve (80%) with active symptoms and 711 (93%) without were not thought to constitute a risk. In diagnostic terms (table IV) only 21 (5%) of normal men were considered to constitute a risk and 54 (10.5%) of those with mixed, predominantly neurotic disorders. Psychotic prisoners clearly

TABLE IV—Relation between police judgment of special risk for violence and psychiatric diagnosis. (Information missing in 128 cases)

	No (%) of men with:							
Police judgment	No psychiatric disorder	Mixed disorder other than schizophrenia or affective psychosis	Schizophrenia	Affective psychosis				
No special risk	371 (95)	461 (89·5)	141 (85)	29 (71)				
Special risk of violence to others	21 (5)	54 (10·5)	24 (15)	12 (29)				
Total	392	515	165	41				

appeared to be the most threatening. Almost all those with affective psychosis who were perceived as threatening were manic. Only one man with affective psychosis had killed. He was depressed and not considered to be a special risk. Only three were convicted of personal assault, and these assaults were trivial, so the judgment of potential for violence was apparently based on presentation of symptoms and not actual violent behaviour. The difference in violence ratings by police between diagnostic groups was significant (χ^2 =30·30, df=3, p<0.0001).

CONVICTION

Seven of the 1241 men died in prison before their trial. Data on final conviction were missing in 93 of the remaining cases. A substantial minority of the men for whom data were available were not convicted of the offence for which they had been charged. Those charged with personal violence were least likely to be convicted of their offence. Ignoring the men for whom conviction data were missing, 11 men (19%) were acquitted of charges of homicide, 68 (20%) of other personal violence, and 14 (18%) of carrying an offensive weapon or firearm. By contrast, all men in this sample who had been charged with

arson were convicted although in three cases the charge was reduced to criminal damage; only 11 (6%) men charged with criminal damage were not convicted. With the exception of vagrancy (10 (15%)) less than 10% of men charged with non-violent offences, including non-violent sexual offences, were acquitted. There was no evidence that mentally ill men were particularly likely to be charged and then acquitted by the courts. On the contrary, as table V shows, for the main categories of violent offence the most disturbed men were more likely to sustain convictions.

SENTENCING

Only 435 (39%) of those men who were convicted and whose sentences were known by the time we stopped collecting data were sentenced to imprisonment (table VI). A further 203 (18%) were sent to hospital or received some kind of official supervision. Forty one per

TABLE V—Association between incidence of conviction* rates and diagnosis in men remanded in custody on criminal charges

Charge	No (%) of men with:							
	Outcome	No psychiatric disorder	Mixed disorder	Schizophrenia	Affective psychosis			
Homicide	Convicted Acquitted Unresolved	27 (73) 10 (27) 3	13 (93) 1 (7)	5 (100)	1 (100)			
Cther personal	Convicted Acquitted	189 (80) 46 (20)	65 (77) 19 (23)	25 (89) 3 (11)	3 (100)			
violence Criminal damage	Unresolved Convicted Acquitted Unresolved	25 64 (94) 4 (6) 5	6 58 (92)† 5 (8) 3	33 (94)† 2 (6) 1	2 6 (100)			

*Percentages calculated for known outcome in court.

*Corrected figures: one schizophrenic man and one patient with mixed disorder who were convicted of criminal damage but charged with arson are excluded.

TABLE VI-Pattern of sentencing for 1114 men

Outcome of sentence	No $\binom{0}{0}$ of men sentenced
Death before sentence	7 (0.6)
Imprisonment	435 (39.0)
Hospital order	78 (7.0)
Probation or other supervision order Non-custodial, unsupervised sentence (such as fines,	125 (11-2)
suspended imprisonment without supervision)	381 (34·2)
Conditional or absolute discharge	81 (7.3)
Total	1114 (100)

TABLE VII-Sentences in relation to convictions for violent offences

cent of the men were variously given non-custodial and unsupervised sentences or absolute or conditional discharges. These patterns of sentencing are particularly interesting as the sample contained all the men newly admitted to the prison charged with violent offences. The only non-violent men in the sample were those who had acquired some sort of label of illness and entered the prison's hospital areas. As the survey thus excluded most of the non-violent offenders we will not make any further specific comment on sentencing nonviolent men.

Even though one third of the men charged with some form of unlawful homicide or other violent assault were considered to be mentally abnormal, table VII shows that most of those who were convicted were given a prison sentence and only a very small proportion were sent to hospital. The one homicidal offender given a non-custodial sentence received a two year prison sentence suspended for two years, apparently without a supervision order. Although the proportion of men sent to hospital for offences against property was higher, two thirds of these men were diagnosed as having some psychiatric disturbance other than personality disorder alone. Many data on previous violent behaviour were missing; but previous violent offending or even previous imprisonment for violent offending did not, overall, appear to increase the chance of subsequent imprisonment.

Table VIII shows the pattern of sentencing in relation to psychiatric diagnosis. All men shown in the table who had "no psychiatric disorder" were violent offenders, whereas all other diagnostic groups contained a full range of offenders. A diagnosis in the prison records exclusively of personality disorder based on repeated antisocial behaviour was not rated as a disorder and this may account for the small proportion of apparently normal men being sentenced by hospital order. The only diagnosis more likely than not to result in a hospital order was pure schizophrenia. If the men complicated their illness with abuse of drugs or alcohol or showed signs of additional disorder of any kind their chances of getting a hospital order were only one sixth of those of their peers with pure schizophrenia. Although numbers were much smaller, the trend was similar for the men with affective psychosis. Despite, however, the apparently good chance of men with pure schizophrenia receiving treatment only 48 (29%) of all schizophrenic men identified became compulsory inpatients, although a further 12 (10%) were engaged in formal treatment or supervision contracts, or both (by probation order). The tiny group of men with schizophrenia or another psychosis who were sentenced to imprisonment may have received treatment; this may also have been true for most of the remaining men who went free, but it is unlikely.

Discussion

One contributory factor to the high prevalence of psychiatric disorder in the remand prison studied may have been a tendency on the part of the police to view mentally ill men as more dan-

		(No %) of men sentenced to:					
	Total No sentenced	Imprisonment	Hospital order	Community supervision	Non-custodial sentence without supervision	Sentence unknown	
Violent offences against another person:		*****					
Homicide	46	40 (87)	5 (11)		1 (2)		
Other violent assaults	282	142 (50)*	17 (6)	16 (6)	1 (2) 107 (38)		
Carrying weapons	67	44 (51)†	2 (3)‡	4 (6)‡	26 (39)§	1 (1)	
Violent offences against property:		· -//	- (-/+	- (-)+		- (-/	
Arson	20	8 (40)	4 (20)	4 (20)	3 (15)	1 (5)	
Criminal damage	163	47 (29)	20 (12)	21 (13)	71 (44)**	4 (2)	

-1

Higher order of conviction received in addition by *five, †11, ‡two, §four, "seven, and **eight men in each respective total.

TABLE VIII-Sentencing in relation to psychiatric disorder

			No (%) of men wi	th:		
	Total No		Mixed disorder, excluding schizophrenia, affective psychosis, —	Schizo	phrenia	Affective	psychosis
	sentenced	No disorder	and pure personality disorder	Pure	Mixed	Pure	Mixed
Imprisonment Hospital order Other treatment or supervision order All unsupervised non-custodial sentences	435 78 125 381	217 (50) 6 (8) 24 (19) 152 (40)	179 (41) 14 (18) 85 (68) 161 (42)	16 (4) 41 (53) 6 (5) 31 (8)	16 (4) 7 (9) 6 (5) 26 (7)	1 (0·2) 8 (10) 1 (1) 5 (1)	6 (1) 2 (3) 3 (2) 6 (2)

There is no evidence that the mentally ill in this series were particularly vulnerable to being detained on charges that were subsequently not upheld in court. If anything the reverse was true. This tendency to a higher incidence of conviction among the mentally ill, however, cannot necessarily be accepted at face value. Once charged they may be less able than their normal peers to defend themselves in court. The substantial incidence of acquittals, which was higher among the mentally normal men on serious charges, is disturbing. Most were imprisoned for weeks and some for as long as 18 months and yet were found not to be guilty of any offence.

Our findings must dispel any notion that custodial remands for the assessment of the mentally ill do much to help them into subsequent treatment. In the accompanying paper we noted that a conservative estimate of all those with active symptoms of psychiatric illness on admission to the prison was 246 men (9% of new admissions).¹ In some additional men psychiatric disorders were diagnosed, although their disorders were apparently quiescent, and a further 257 men (9.4%) were addicted to drugs or alcohol. Of the 246 actively ill men, only 78less than a third-received hospital orders. Within the whole sample a further 175 men received treatment or supervision orders of some kind, but many of these were neurotic, psychotic without symptoms, or men who did not show any formal psychiatric disorder. Interestingly, in the present series the main overt factor that distinguished those who were ordered to receive treatment from those who were not was the presence of complicating factors such as substance abuse or additional diagnoses that militated against treatment. There is a popular view that criminals are rejected for treatment because of their violence, but this was not borne out by our study. For example, there was no difference between those schizophrenic men who were accepted for treatment and those who were not in terms of the nature of their current offence. If anything a history of violence improved their chances of receiving a hospital order.

Bowden studied the outcome of recommendations for treatment in an earlier sample of men remanded to the same prison BRITISH MEDICAL JOURNAL VOLUME 289 7 JULY 1984

for medical reports.⁵ ⁶ Only 14% were recommended for treatment, although 94% of these were accepted.⁵ He evaluated the progress of those who were accepted 14 months later.⁶ He concluded that those with improved mental states represented only 5% of those initially remanded to Brixton prison. Just over one third of those who received treatment, however, showed definite improvement and a further 26% showed some improvement in mental state, although their social behaviour remained impaired or offensive. Only slightly more than one third failed to show any benefit from treatment, and no account could be taken of the receiving psychiatrist's commitment to the patient, which is not always of the fullest for offender patients. Whether any of those who were not referred for treatment might have benefited had they been so remains speculative. Certainly only a few of those who have psychiatric disorders receive treatment after custodial remands; most are not even offered the chance of treatment. According to Bowden, nearly two thirds of those mentally abnormal criminals who do get the chance of treatment are likely to show some improvement.⁵ ⁶ The new Mental Health Act of 1983 rules that in future psychiatrists must consider the chances not only of curing patients but also of preventing their deterioration. This is an important time to consider whether psychiatry offers enough to offenders with psychiatric disorders.

This study was supported by a grant from the Medical Research Council. We thank the Home Office for permission to carry out the work and the staff of Brixton prison, London, for their support and help. Mrs Anne Hearn gave invaluable help in collecting and documenting data.

References

- ¹ Taylor PJ, Gunn J. Violence and psychosis. I. Risk of violence among psychotic men. Br Med J 1984;288:1945-9.
- ² Banks C, Brody S, Fairhead S. A survey of the south east prison population. London: HMSO, 1978. (Home Office Research Bulletin No 5.)
- ³ Gunn J, Robertson G, Dell S, Way C. Psychiatric aspects of imprisonment. New York: Academic Press, 1978.
- Gibbens TCN, Soothill KL, Pope PJ. Medical remands in the criminal court. London: Oxford University Press, 1977. (Maudsley monograph No 25.)
- ⁵ Bowden P. Men remanded into custody for medical reports: the selection for treatment. Br J Psychiatry 1978;133:320-31.
- ⁶ Bowden P. Men remanded into custody for medical reports: the outcome of the treatment recommendation. Br J Psychiatry 1978;133:332-8.

(Accepted 22 March 1984)

ONE HUNDRED YEARS AGO The Vestry of Camberwell have gleefully passed a special vote of thanks to their health-officer, Dr. Bristowe, for a report in which he trenchantly attacks the model by-laws recently issued by the Local Government Board with respect to houses let in lodgings. We shall not follow Dr. Bristowe through his various criticisms on the by-laws; but there is one point in his remarks that appears to merit special attention, and that is the apportionment of duties between the different persons concerned in tenementhouses. If there be one point more than another which the recent discussions on the subject have brought out, it is that houses inhabited by a number of families need some one corresponding to the French concierge to keep order and be responsible for the cleanliness of the premises. The by-laws should impose upon this person, and not upon each lodger, the responsibility of performing the duties prescribed in the regulations. How, for instance, is the sanitary authority to enforce on each individual lodger the requirement that he shall cause every window of every sleeping-apartment to be kept fully open for two hours every day; or that he shall cause the room of every floor let to him to be thoroughly swept at least once in every day, and thoroughly washed at least once in every week? As Dr. Bristowe observes, "it is at least as desirable that he should wash himself from head to foot every day, and that his clothing should be frequently changed and cleansed"; but for these desiderata no provision has been made (nor could be expected) in the by-laws. Practically speaking, it is almost impossible that a sanitary authority can exercise any real power over lodgers, except through the people who take them as lodgers; and it appears very unwise to relax the hold on the letters of lodgings by throwing (as the model by-laws do) duties on lodgers which it is the duty of the letter of lodgings to perform, and many of which it is in his own interests that, backed up by the sanitary authority, he should himself enforce. (*British Medical Journal* 1884;i:624.)

Correction

Resolution after radiotherapy of severe pulmonary damage due to paraquat poisoning

Errors occurred in the paper by Dr D B Webb and others (28 April, p 1259). (1) In the second line of the abstract and the eighth line of the case report 5 g paraquat should have been about 3 g. (2) In the third line of the abstract 3·4 kPa should have been 4·6 kPa. (3) In the third line of the case report alkaline dithionate should have been alkaline dithionite. (4) In the seventh line of the case report 80 mg/l should have been 80 μ g/l. (5) In the fourth line of the third paragraph of the case report γ rays labelled with cobalt-60 should have been γ rays produced from a cobalt-60 source. (6) In the second and third lines of the discussion intracellular nicotinamide adenine dinucleotide phosphate.

healthier men.