unquestionable that selective absorption from the bowel can result in hyperchloraemic acidosis and other chemical disturbances.* The capacity to deal with this seems, however, to be closely related to renal function. The analysis of the B.A.U.S. series and of my own revealed that 75% of those whose blood chemistry findings indicated hyperchloraemic acidosis had an elevated blood urea as well as objective evidence of renal impairment on excretion urography. It also showed that only 20% of that number exhibited symptoms of chemical imbalance and that almost without exception chemical imbalance with symptoms was associated with a raised blood urea and dilatation of the upper urinary tract.

I have recounted the mode of death which rapidly ensued after six years of well-being when there was no evidence of hyperchloraemic acidosis or even of acidosis, and for which a sudden overwhelming renal infection seems to have been responsible. Recently another patient died, 11 years and 6 months after transplantation for vesico-vaginal fistula. The Coffey technique had been used and there was no renal or ureteral dilatation at the time of operation. Just over a year before death biochemical examination had shown an elevated plasma chloride with a lowered alkali reserve (Table III). There was then well-marked dilatation in the

or colostomy which the procedure necessitates is a negation of one of the main objectives of ureteral transplantation—namely, to restore the patient to a normal-like way of life. It is as well to dispense with the uretero-colic anastomosis and divert the urine by ureterostomy.

Summary and Conclusions

The results of carrying out uretero-colic anastomosis on 162 patients are analysed.

It is evident that, provided the lesion for which urinary diversion is performed is not one which itself predisposes to ill-health and eventual mortality, transplantation of the ureters to the bowel can be followed by well-being and expectation of a long life. This in great measure is influenced by the renal status, which in turn is largely dependent on the success of the actual anastomosis. The union between ureter and bowel must therefore be accomplished with as high a degree of technical perfection as possible.

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TABLE III.—*Blood Biochemistry after Transplantation of Ureters in May, 1941*

	June, 1951	Nov. 19, 1952	Nov. 26, 1952
Blood urea ..	28 mg./100 ml.	198 mg./100 ml.	196 mg./100 ml.
CO ₂ combining power ..	48.1 ml. CO ₂ /100 ml.	35 ml. CO ₂ /100 ml.	21 ml. CO ₂ /100 ml.
Plasma chlorides ..	109.4 mEq/litre	103 mEq/litre	117 mEq/litre
Plasma sodium ..	142 ..	..	..
Serum potassium ..	5.5 ..	..	3.1 ..

upper urinary tract, but the blood urea was only 28 mg. per 100 ml. She was working as an assistant hotel cook and her only complaint was that she had become very stout. In December, 1952, she was admitted to another hospital in a semicomatose condition, having been unwell for the previous 10 days, suffering from mild rigors and pain in both renal areas. Her blood urea was 198 mg. per 100 ml., but plasma chlorides were actually lower than a year previously. Acidosis was confirmed, the alkali reserve having further fallen. She failed to respond to alkaline therapy and died nine days after admission. Four days before death she exhibited definite hyperchloraemic acidosis though the urine output had risen from 7 to over 70 oz. (200 to over 2,000 ml.) a day. Post-mortem examination showed bilateral renal dilatation, moderate on the right, marked on the left, the kidney on that side having only a strip of functioning tissue, and the left uretero-colic anastomosis stenosed though patent. The histological picture was of advanced pyelonephritis.

The severe electrolyte imbalance which finally developed in the above instance was associated with gross renal damage and uraemia. I can find no evidence of any patient in my series whose death could be attributed solely to chemical imbalance. Indeed, I have had but few incidents in the past three years—during which I have been on a constant lookout for them—of serious disturbances arising from this cause, and such as have been encountered without marked renal damage have been readily corrected by appropriate infusion therapy, alkalis, and an in-dwelling rectal tube. Less severe symptoms, such as anorexia, thirst, salty taste, and polydipsia, are generally improved by regular evacuation of urine, salt limitation, and alkalis. I therefore deprecate transplanting the ureters into a segregated loop of bowel as a precaution against the onset of electrolyte disturbances. This measure will not eliminate the possibility of subsequent renal damage due to faulty union between ureter and bowel, and the wet enterostomy

PSYCHOPATHIC STATES AND ATTEMPTED SUICIDE

BY

I. R. C. BATCHELOR, M.B., F.R.C.P.Ed., D.P.M.

Deputy Physician Superintendent, Royal Edinburgh Hospital for Mental and Nervous Disorders; Lecturer in Psychiatry, University of Edinburgh

Suicidal attempts are medical emergencies which the general practitioner and the hospital surgeon and physician alike have to meet, since in many instances it is found necessary to remove the suicidal individual from his home to hospital for resuscitation or repair. When his physical treatment has been completed it often happens that he appears remarkably normal: if, as he may do, he then insists on his discharge from hospital, grounds for detaining him longer may not be found. There is evidently a type of suicidal attempt, dangerous enough to need medical intervention, of which the more obviously morbid mental accompaniments are transient. In some centres these cases are not referred to psychiatrists and pass quickly from observation; this apparently is one of the reasons why a relatively common phenomenon has been so little investigated. Experience over some years in a general hospital where all cases of attempted suicide are examined by a psychiatrist has shown that the large majority of these "birds of passage" are suffering from psychopathic states.

Henderson (1939), focusing attention on the suicidal proclivities of psychopathic individuals, gave a description of the situation which is admirable in its emphasis on the peculiar clinical features and the social implications. His lead has, however, not been followed; and it is thought that a detailed survey of a group of such cases might now promote their more general recognition and stimulate further research, particularly into their aetiology.

There are few papers in the literature which indicate the proportion of cases of attempted suicide which may be attributed to psychopathic states. Dahlgren (1945), in a follow-up study of 237 cases of attempted suicide, gave 12.2% (26 men, 3 women) the diagnosis of psychopathia; but his clinical material was unsatisfactory, being

*The reader is referred to the important contributions on the subject of chemical imbalance after uretero-colic anastomosis, published in the *British Journal of Urology*, 1952, 24, pp. 302, 307, 313, 317.

so heterogeneous as to include morons and apparently also cases possibly based on cerebral trauma or infection. Stengel (1952) reported an incidence of 13.6% (15 men, 6 women) in a series of 138 cases similarly investigated by follow-up, and commented that his group was not representative of the suicidal attempts made in the general population. It is probable that the percentages quoted are too low.

General Characteristics of the Cases

In a series of 200 consecutive cases of attempted suicide admitted to a general hospital in the years 1950-2 and personally observed, 50 (25%) were given initially the diagnosis of psychopathic state. Further investigation has shown that in eight of these cases the diagnosis was perhaps disputable: three were difficult to assess, being foreigners, while in the other five the degree of instability revealed might be held to be insufficient to justify the diagnosis and to merit rather a label of hysterical or schizoid personality. In 42 cases, therefore, the specificity was not in doubt, and these have been investigated in detail.

The sex, age, and marital state of these 42 individuals are detailed in Table I.

TABLE I

Age Group	Male	Female	Total	Marital State	Male	Female	Total
0-19 years	1	—	1	Single	8	4	12
20-29 "	7	7	14	Married	12	7	19
30-39 "	5	5	10	Widow(er)	—	2	2
40-49 "	7	4	11	Separated	4	3	7
50+	5	1	6	Divorced	1	1	2
Total	25	17	42	Total	25	17	42

Family Histories

In 28 (66.7%) of the cases there was a family history of psychiatric abnormalities, which were manifested in 78 of their relatives, 42 of these relatives being alcoholics. Six (14.3%) of the cases gave a family history of suicide, six of their relatives having attempted suicide, two successfully. Two cases had a family history of homicide. In 15 (35.7%) cases a history of mental illness, and in 16 (38.1%) cases a history of alcoholism (in six cases of both) was obtained in first degree relatives. There is apparently a significant relationship between psychopathic states and a family history of alcoholism.

"Broken Homes."—In 31 (73.8%) cases the patients had, in their first 16 years, been deprived of a normal life with their parents. Some of the details are given in Table II.

TABLE II

	Male	Female	Total
Broken home	17	14	31
Illegitimate	2	2	4
Permanent loss of father	6	8	14
" " mother	4	5	9
" " both parents	1	3	4
Alcoholism of father	8	4	12
" " mother	4	4	8
" " both parents	—	4	4

One man and six women had lost their fathers in the first five years of their lives, and one man and two women their mothers. Figures can, of course, indicate only very crudely some items in these childhood situations. They are, however, sufficiently striking: parental alcoholism occurred in 38.1% of the cases, loss of the father in 33.3%, loss of the mother in 21.4%.

The importance of a broken home in the genesis of the suicidal acts of this group seems undoubted, but we have only the roughest clues as yet about how this factor operates. We do not know whether an absence or distortion of parental influences is the more traumatic, nor which parent may be the more essential; nor do we know the ages

at which the greatest harm may be done. The broad implications of these findings have been discussed elsewhere (Batchelor and Napier, 1953a).

Previous Personal Characteristics

This suicidal group was typical of the psychopathic states as a whole. The majority were aggressive, the minority passive and inadequate. Reactions primarily of aggression were usual in the former, reactions primarily of evasion in the latter, but these correspondences were not absolute. All had shown persistent maladjustment, starting in childhood or adolescence, and all were complained of as unpredictable and totally unreliable in word and deed. One-third had previously received psychiatric treatment.

Impulsiveness is highly characteristic of the psychopath who attempts suicide. With equal haste, on the spur of the moment and without heed to the future, he may accept or reject serious social obligations and the most intimate personal ties, leave his home, throw up a profitable job, or act with physical violence. Explosive outbursts of temper, threats, and assault were very commonly reported. Many were described as bullying, vindictive, jealous, cantankerous, trouble-making. Many had been actively cruel to their spouses or to their children.

In this group one often encountered individuals who were egotistical, cold, friendless. Many were morbidly touchy or secretive, with sensitive ideas of reference. Several realized that, unable to tolerate constraint of any kind, they were more content and safer when left alone. A few had had paranoid episodes. Mood swings were common, and some gave a history of neurotic symptoms when under stress.

Exhibitionistic and narcissistic traits were also commonly seen, expressed in endless demands for attention, flamboyant dress or hair styles, fantastic lying, masquerading, tattooing. One woman had burnt on her arm with cigarettes the initials of her lovers. An exaggerated narcissism was in some cases associated with defective personal hygiene.

The majority were maladjusted sexually. Five men and 10 women were heterosexually promiscuous. Eight men and one woman showed homosexual trends, at least one-third of these being practising homosexuals. Five women had had illegitimate children.

Fourteen men and six women gave a history of alcoholism. Five men were drug addicts. Nine men and 10 women had made a total of 29 previous suicidal attempts.

The psychopath is typically a restless Ishmael. Almost half the cases had been truants in earlier years: some individuals still had recurrent overpowering urges to go off alone. Usually there was a history of numerous futile changes of occupation or of long periods of unemployment. In only six cases (one man, five women) was the work record satisfactory.

Religion played very little part in these people's lives. The majority expressed a belief in a personal God, but less than half believed in some sort of immortality or after-life. Three-quarters of the group admitted that they knew attempted suicide was an offence against the law: many had previously been charged on account of suicidal attempts. No evidence was found, however, to show that legal sanctions had acted as a deterrent: the suicidal individual gave no thought to the matter at the time of his act, or did not care, or expected to be dead.

Thirteen men had police records. The commonest offences were theft, housebreaking, assault, and drunkenness with disorderly behaviour; there were also convictions for sexual offences, fraud, begging, truancy, and arson. Two women had police records, convicted of theft and drunkenness. Other individuals were known to the police, or had committed petty thefts which had not been reported. At least five of the men were chronic gamblers.

The social incompetence of the group is further illustrated by their low social status and living conditions, their unemployment, poverty, and isolation, details of which are given below.

Social Data

Table III gives an analysis of the social conditions of the group. Ten individuals suffered from overcrowding, and six others lacked privacy in their living conditions.

TABLE III

	Male	Female	Total
Present social class:			
I. Professional	—	1	1
II. Intermediate between I and III ..	1	—	1
III. Skilled workers	2	1	3
IV. Intermediate between III and V ..	6	1	7
V. Unskilled workers	16	14	30
Present employment status:			
Employed (including domestic duties)	10	10	20
Unemployed, but fit	9	5	14
" because unfit	6	2	8
Financial state:			
Adequate	7	9	16
Financial stress	9	6	15
Subsistence level	7	2	9
Below subsistence level	2	—	2
Housing and living conditions:			
Slum	8	7	15
Artisan	13	8	21
Middle-income group	3	2	5
Not known	1	—	1
Living with spouse or lover	12	8	20
" " parent(s)	5	5	10
" " other relative	1	1	2
" in lodging-house or hostel	6	2	8
" alone	1	1	2

Social Circulation and Mobility.—Of the group, 35 were born in Scotland: of these, 17 were born in Edinburgh. Nine were rural bred. A fall in social status had occurred in 19 (45.2%) cases—a circumstance which could easily be correlated with their personality defects. In the past 12 months 14 had changed the localities they lived in (some had made numerous changes): in six cases these moves were local.

Group Membership (including Religious Affiliations).—Among the 42 individuals were 28 Protestants, 10 Roman Catholics, a Salvationist, a Jehovah's Witness, a pantheist, and an atheist. Eight of the Catholics had lapsed. Only three individuals were even irregularly church-going. Four men were loosely affiliated to one of the following organized non-religious groups: Freemasons, Buffaloes, Alcoholics Anonymous, and a camera club. Two women were affiliated to groups, but again only barely so: one was a lapsing member of Alcoholics Anonymous, and another a quarrelsome performer in an amateur theatrical company.

Physical State

The physical state of 17 (68%) of the men was satisfactory. The following were the diagnoses of the eight who were ill: arteriosclerosis (2), osteomyelitis of spine, carcinoma of colon, peptic ulcer, mild bronchitis, disabling inguinal hernia, gonorrhoea. Those complaining of fatigue were physically ill.

The physical state of eight (47.1%) of the women was satisfactory. Three were physically ill, suffering from occupational dermatitis of hands and face, tabes dorsalis, gonorrhoea. Six others were suffering from debility or marked fatigue. In only two cases was the suicidal attempt closely related in time to menstruation.

Setting of the Suicidal Attempts

Nearly one-third of the cases reported no nervous symptoms in the period shortly before their suicidal attempts. The remainder complained of one or more of the following: increased irritability, tension, restlessness, fatigue, anxiety, depression, insomnia; or had somatic symptoms such as headache or head pains, flatulence, and "fibrositis." Some had an access of ideas of reference and believed that everyone and everything were against them. It is rather striking that 15 (60%) of the men and 8 (47.1%) of the women

were not under the care of their own doctors at the time of their suicidal attempts. Only one individual was receiving psychiatric treatment.

In 23 (54.8%) cases the individual gave no warning, either immediate or remote, of his suicidal intentions. Six men and six women had lately made suicidal threats: Four of these and two other men and one other woman had made many suicidal threats in recent years. The husband of one woman said, "She threatens suicide whenever she runs out of cigarettes"; of another it was said, "I couldn't tell you of all the times she has threatened to take her life."

Three men prefaced their self-injury by assaults on their wives. In two of these cases the assault was accompanied by threats of murder, and in the third case a police charge was brought. A fourth man had recently threatened to murder his wife. Five other men had histories of serious assaultive behaviour at home. One woman attempted to gas the man with whom she was living and then herself. Another woman attempted to strangle her homosexual partner. A third woman assaulted her stepdaughter. These facts make obvious the close relationship of homicidal to suicidal trends in this group.

The Suicidal Attempts

How Long Contemplated?—Table IV shows that 26 (61.9%) of these suicidal attempts were impulsive. The majority of those who had been contemplating the act for

TABLE IV

	Male	Female	Total
Impulsive	15	11	26
Contemplated for hours	2	3	5
" " days	1	1	2
" " longer	5	1	6
Information withheld	2	1	3

longer said that their suicidal thoughts had been intermittent. One man claimed that he had been brooding over his act for two years. Nearly identical statements about their attempts were made by many of the group: "I took them on the spur of the moment"; "I didn't think at all." It is interesting that some described their acts in the same phrases as an epileptic might use to recount his fit: "It came on us all of a sudden"; "It just came over me."

Immediate Stimulus.—The specificity of the precipitants in this series is impressive: in 85.7% the immediate stimulus was either a personal quarrel or imminent retribution, the former about twice as commonly as the latter (Table V).

TABLE V

	Male	Female	Total
A quarrel:			
With spouse	7	5	12
" lover	4	6	10
" other person	2	1	3
Environmental sanctions:			
Threat of arrest or trial	5	2	7
" mental hospital admission	—	2	2
Detention in gaol	2	—	2
Nil	3	1	4
Not known	2	—	2

The quarrel in the cases of four men and two women was over a jilting. In two cases the unexpected loss of a job and in two others the refusal of expected financial assistance contributed materially to a state of irritable discontent.

Drunk or Sober.—Eleven men and one woman were under the influence of alcohol at the time of their suicidal attempts. Enough had been taken to diminish their self-control, but not enough to render them amnesic.

Timing and Situation.—Half of the attempts (male 12, female 9) took place between 7 p.m. and midnight—at a time, that is, when the factors of fatigue and intoxication were most often operative, and the individual was apt to return home quarrelsome to a critical reception. April,

May, and June were the most favoured months. Twenty-seven of the attempts were made in the individual's own bedroom, kitchen, or living-room. Other sites selected were: (a) in own house—lavatory (2), bathroom (1); and (b) elsewhere—in the street (3), police cell (2), acquaintance's house, train, railway station, cinema, public park, hill-top, and house under construction.

Method.—Poisoning, a passive method, was chosen by 38 (90.5%) (Table VI). "Other poisons" employed were methylated spirits, digitalis, bromide and chloral mixture, "izal," potassium cyanide, tincture of opium (the last two combined).

TABLE VI.—*Method Adopted*

	Male	Female	Total
Poisoning:			
Barbiturate	10	13	23
Aspirin	4	1	5
Coal gas	4	1	5
Other	3	2	5
Cutting	3	—	3
Hanging	1	—	1

Reasons for Choice of Method.—In the majority of psychopathic cases availability appears to be the paramount factor determining choice of method. Barbiturates can now be found in a great many homes, coal gas is usually on tap, and aspirins may be bought for the purpose. The subject may report that he used the method nearest to hand: "I saw the box on the sideboard"; "I put my hand in my pocket and felt them there." Another determinant is the expected painlessness of the mode of exit: feelings of guilt do not compel the psychopath to inflict maximum suffering on himself, and he may confess to his hedonism—"I thought I'd sleep away nicely." There is no doubt that in some cases also deeper compulsions operate, and are expressed particularly by those who state, "I couldn't think of any other way." It is likely that the predominance of passive oral methods can in part at least be ascribed to the immaturity of the personalities and the incidence of early deprivations in this group. Direct suggestion seems only occasionally to be a factor.

Loss of Consciousness; Amnesia.—Eighteen men and 14 women lost consciousness as a result of their attempts. It was surprising that none claimed an amnesia for the act itself, since the intense emotional perturbation usually associated with it might have been expected in some cases to cause a clouding of consciousness.

Attitude after the Attempt.—The considerable number who denied their suicidal intentions is noteworthy (Table VII). Some of these admitted to having had feelings of hopelessness. Others stated that they had just wanted to

TABLE VII

	Male	Female	Total
Suicidal intention admitted freely ..	11	6	17
" " " " partially ..	—	1	1
" " " " ; later denied ..	3	1	4
" " " " denied; later admitted ..	2	2	4
" " " " denied ..	8	6	14
" Don't know " ..	1	1	2

sleep or to get some release: "It suddenly dawned on me that I could sleep and sleep and forget it all." Eleven individuals were vacillating, evasive, or confused about their acts: "I don't think I wanted to die actually"; "I don't know what I meant"; "Could I do this by mistake?" Attitudes may even be changed during the course of an interview. Remorse is hardly ever expressed.

Estimation of its Seriousness.—It is impossible to give a precise estimate of the seriousness of each of these attempts. One cannot gauge their gravity simply by reference to the means employed, since in many cases the rapidity with which the act was perpetrated marred its efficiency. Also, amongst this group of people one cannot believe all those who claim that they have been in earnest nor all those who

deny it; while others seem to know no more clearly than an observer what they had intended. It is certain, however, that the majority of these people had done things which were highly dangerous to themselves; and that in at least one-third of the cases the act was carried out with great determination. The severest difficulty in assessment arises in those cases in which the individual has felt that he must escape from a situation which has become intolerable to him: the duration of his proposed absence may be problematical. In perhaps a handful of cases in this series the suicidal drive may have been minimal.

Motives

As are probably all suicidal acts, these attempted suicides were complexly determined. Certain psychopathological trends have been isolated, and are discussed below. This atomistic arrangement, while it assists clarity in presentation, does some violence to the intimate interrelationships of the factors concerned and perhaps suggests that these acts are determined at a more conscious level than is in fact the case. The trends discussed here may be compared with the motives discerned in a group of 40 old people who made suicidal attempts (Batchelor and Napier, 1953b).

Hate.—The commonest precipitant of these attempts was a quarrel, mobilizing intense feelings of hatred for a person previously ambivalently loved and hated. In several cases it was quite obvious that the suicidal individual had felt the provocation to murder. In more than one-quarter of the cases motives of spite, pique, and revenge were apparent. The suicidal act may be consciously intended as the most bitter censure. One man's farewell note expressed this succinctly: "Dear Dad, this is Good-bye. You haven't been much of a Dad to me.—Johnny." The aggrieved individual may turn the tables on the hated person by attempting to lay a death at his door and so render him a murderer. For example, a young woman, believing herself jilted, went to her lover's house and gassed herself while lying on his bed. In the case of the morbidly narcissistic individual, a wound to self-esteem which would appear to the average person innocuous may be sufficient to precipitate a suicidal attempt. The culminating incident which provoked a youth to attempt to poison himself with drugs belonging to his mother was her order, which humiliated him before others, to take his cap off in the house.

Evasion.—These individuals often themselves recognized the evasive nature of their reactions. "When I get into a complete jam this sort of thing occurs to me"; "I didn't want to face it." Of alternative modes of escape, alcohol was frequently used. One man, who previously had had a fugue lasting two days immediately after being jilted, made his determined suicidal attempt immediately after he had experienced a similar disappointment. Closely related to fugues, though not associated with amnesia, are the impulsive journeys which psychopathic individuals often embark on. More than one of these people had been planning emigration as a solution of his difficulties; one, when his suicidal attempt had failed, announced his intention of entering a monastery.

Identification with a Dead Person.—Four men had identified themselves with their dead fathers: one of these parents had himself attempted suicide. One of these four men had in addition identified himself with a dead male friend, to whom he had been homosexually attached. Three men and one woman had identified themselves with their dead mothers. The suicidal individual may speak openly of wanting to rejoin the dead person.

Experimentation and the Dramatic Demonstration of Omnipotence.—Defiantly rejecting an unappreciative world, the malcontent may close his account in the most individualistic manner possible to him—by a murder of the self, by the self, for the self. The suicidal attempt in such cases may be deliberately, and romantically, staged. One of this group, after being jilted, climbed the Calton Hill at midnight, placed the girl's Bible beside him, and so slashed his wrist that he nearly died: he was sustained by an

exalted feeling of omnipotence as he looked down on the city of his nurture and the people he despised. Another blasé young man, before poisoning himself, left a long letter in which he took a sophisticated farewell of the world: "Sidereal Time marks out the minute fragment of my life against a canopy of stars. I have chosen to shorten it. I am my own executioner. . . . I join Mayakovsky." The suicidal act is in such cases ecstatic. Closely allied to dramatic and erotic motives is the factor of experimentation. The excitement of danger clearly held a vivid appeal for these two men and for some others in this group. Their morbid tensions were geared to it. Feeling different and estranged from their fellow men, one can understand that they were the more ready for a crucial experiment to discover where they belonged. A suicidal attempt may be a form of initiation, a test of manhood.

Manipulation of the Environment.—While efforts to dominate and to punish the environment were clearly evident in the suicidal attempts prompted by frustration, spite, and revenge, efforts deliberately to cajole it were identified in a small minority of the cases. One woman stated later, "I thought it would change my husband"; a man admitted, "I just took the gas simply to frighten my wife; I didn't think it would have gone so far." These two acts may have been bungled gestures, and in any series of attempted suicides there are probably some such cases.

Fears.—Phobias were less common than well-founded apprehensions. In addition to those afraid of social consequences, two men justifiably feared the outcome of their physical illnesses, and one woman an illegitimate pregnancy. Two men and two women feared insanity. Two other individuals had hypochondriacal bodily complaints.

Loneliness.—This factor is more closely related to the suicidal individual's advancing age than to his psychopathic reaction. It strongly influenced an illegitimate girl aged 20, and three individuals past middle age.

Guilt.—In only one case did guilt seem prominently to be a factor. It may have been a factor overlooked in other cases; but one has the strong impression that it is an element of little importance in the genesis of psychopathic suicidal attempts.

Frustration Reactions.—It has been proposed (Batchelor, 1954) that the concept of an acute frustration reaction is applicable to many of these impulsive acts. This concept complements and does not minimize the importance of the psychopathological factors described above.

Disposals

In 35 (83.3%) cases the patients were discharged from the general hospital within two weeks, 22 being detained in the observation ward for a week or less and 13 for one to two weeks; three were detained for two to three weeks, and four for a longer period. Of the 36 (85.7%) discharged home, 16 attended for further out-patient psychiatric investigation and treatment. Three men and three women were transferred to a mental hospital: only one of these was under certificate.

Only one individual has committed suicide in the year following the suicidal attempt.

Discussion

When one compares the suicidal acts of psychopaths with those of individuals suffering from, for example, depressive psychoses, one is impressed with how much in the former is on the surface. Many have obvious environmental precipitants, aggression is more nakedly displayed, frictions in personal relationships are more easily identified, and, while both intrapsychic and external conflicts are undoubtedly operative, the latter are of considerable significance.

Motives of guilt and self-punishment are less potent in psychopathic cases; and for this reason alone these suicidal attempts would tend to be less fatal. Poisoning is more easily treated than many other injuries, and the act—following, for example, a quarrel at home—may be per-

petrated in circumstances which facilitate its detection. The flood-marks of the individual's rage or panic fear may therefore be soon removed, and his quick recovery of poise may belie the intensity of his recent emotional storm. The nearer in time that one stands to these acts the more seriously is one apt to estimate them, while in a retrospect one may be aware less of the act itself and more of its consequences. Impressed in his follow-up study by the modification of the social situation which the individual's suicidal act may effect, Stengel (1952) has drawn particular attention to the social element in suicidal attempts, and, considering these acts as unconsciously directed towards a re-establishment of human relationships as well as towards death, has emphasized their "appeal character."

That nearly half the cases had made previous suicidal attempts might be held to support the hypothesis of their "appeal character." Appeals to others for help might equally be repeated because of their previous failure or because of their learned effectiveness. But we should also link the repetitiveness of these acts with their outstanding quality, which is explosiveness. We are then strongly reminded of the behaviour of the epileptic. There are other correspondences: the psychopath's suicidal attempt, like the epileptic's fit, may come suddenly or be prefaced by a period of increasing tension and irritability; it may be precipitated by emotional frustration, alcoholism, or fatigue; some clouding of consciousness may accompany it (Henderson, 1939); and, while in some cases it may be followed by a period of collapse or of disturbed rather random behaviour, recovery is usually remarkably rapid. The suicidal attempt of the psychopath might often be fairly accurately described as a suicidal fit.

Like the child, the psychopath is self-centred, instinct-driven, and lives in the present; his wishes and his expectations approximate; he is deficient in self-control and natively destructive. His suicidal acts also bear a strong resemblance to those committed by children. Many writers, from Maudsley (1895) to Despert (1952), have drawn attention to the fact that children may embark on self-injury on sudden impulse, in a setting where emotional depression is often not obvious; have instanced motives such as jealousy, revenge, identification with a dead person, and fear of punishment (in the adolescents also disillusion and experimentation); and have emphasized that the precipitants of these acts may appear trivial. Though the evidence is less abundant and established, there is also some suggestion at least of a resemblance between the suicidal acts of psychopaths and those of primitive peoples.

It is likely that even under the most favourable conditions the number of these acts which could be forestalled would be small, since usually the self-injury follows its stimulus so quickly or unexpectedly. Prophylaxis must begin therefore in childhood, when, or before, the first indications of emotional instability or social maladaptation or delinquency become apparent; and it must deal with such severely traumatic factors as parental alcoholism. But here we are gravelled by lack of information: we need to know far more than we do about heredity, for example; about the pathophysiological relationships between psychopathy and epilepsy; about the structure and effects of the "broken home" situation; about the unconscious factors which go to produce criminal behaviour; about impulse and its control.

We are obviously confronted by complex problems. We have to work against a background of social changes outside our effective control, of which the phenomena we are treating are to some extent at least reflections. And we have to deal with a situation which, though it may be more common than formerly, is certainly not new: centuries ago a discontented man was defined as "one that is false out with the world and will be revenged on himself."

Summary

The cases of 25 men and 17 women suffering from psychopathic states, who attempted suicide and were

admitted to a general hospital, have been investigated in detail from psychiatric and social aspects. The sample suggests that at least one-fifth of attempted suicides belong to this group.

A family history of psychiatric abnormality was obtained in 67% and of suicide in 14% of the cases.

Of the group 74% came from "broken homes." Previous suicidal attempts had been made by 45%. The majority of the patients were in the first half of life, and all had shown persistent social maladjustment; most typically they were impulsive, aggressive, restless, egocentric, and affectionless; many gave histories of unemployment, crime, sexual maladjustment, alcoholism, drug addiction. 71% were in the lowest social class.

The physical state was satisfactory in 60%.

Nearly one-third had not been complaining of nervous symptoms, and one-half were not under the care of a doctor at the time of their suicidal attempts. Homocidal trends were in several cases obvious. The majority of the suicidal attempts were impulsive, precipitated by a personal quarrel or the threat of retribution. Alcohol and fatigue were significant factors. Poisoning was chosen by 91%. Many were confused about their real intentions.

The psychopathology of these acts is described and the following motives are considered most significant: hate, evasion, identification with a dead person, fears, experimentation, the demonstration of omnipotence, and manipulation of the environment.

Of the group 86% were discharged home.

The difficulty of judging the seriousness of these attempts is discussed, their resemblances to the episodically disturbed behaviour of the epileptic and to the suicidal attempts of children and primitives are briefly considered, and the need for further research and its possible directions are indicated.

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The decision of the Department of Health for Scotland to combine a publicity drive against tuberculosis with mass radiography surveys in selected areas is largely based on experience at Greenock. Here, last autumn, one-fifth of the adult population (13,537) came forward for x-ray examination, and as a result 58 previously unknown active cases of pulmonary tuberculosis were discovered—a yield of 4.3 per 1,000 of those examined. A further 93 patients (6.9 per 1,000) were placed under surveillance. It is pointed out that a far higher proportion of the population would have been x-rayed had not the radiography units been previously committed to routine work such as the examination of National Service men. The Department sums up the Greenock experience in these words: "The case for a change in emphasis in favour of mass x-ray drives is stronger when the incidence of active tuberculosis discovered in Greenock is taken into account."

MECKEL'S DIVERTICULUM AS AN ABDOMINAL EMERGENCY

BY

ERIK CHRISTENSEN, M.B., B.S.

(From Surgical Department A of the Frederiksberg Hospital, Copenhagen)

"Meckel's diverticulum is frequently suspected, often looked for, and seldom found" (Charles Mayo, 1933). This vestigial structure may make its presence known dramatically, and the diagnosis is seldom made pre-operatively. Few surgeons have extensive experience of the condition, and this review is based on a small series of five cases.

Diverticula may be found anywhere in the gastrointestinal tract. Most of them are acquired and have their origin at the point of penetration of the muscle coat by the mesenteric vessels (Edwards, 1939). Among the congenital diverticula are the rare caecal diverticula and Meckel's diverticulum. Meckel's diverticulum is a remnant of the foetal vitello-intestinal duct, which in the foetus forms a channel between the midgut and the yolk sac. As distinct from acquired diverticula it is a true diverticulum, consisting of all the layers of the intestinal wall.

Pathology

Remnants of the vitello-intestinal duct may be encountered in the form of (1) a persistent duct from the ileum to the umbilicus with secretion of mucus, or even faecal matter; (2) a short umbilical sinus or an umbilical polyp; (3) a vitello-intestinal cyst; (4) a fibrous band from the umbilicus to a Meckel's diverticulum; or (5) the band may be attached to intestine, mesentery, or another viscus, commonly in the pelvis; (6) a solitary Meckel's diverticulum is the remnant most often found. An artery may be contained in the above band—namely, the vitelline artery.

The different intestinal diverticula were classified in 1812 by Johann Friedrich Meckel (the younger); he gave a full description of the solitary diverticulum of the ileum which bears his name. It had, however, been described earlier by others. Among the congenital abnormalities of the intestinal canal it has the highest incidence, and in necropsy materials it is found in 1–2% (Treves, 1918). Its average length is 2 in. (5 cm.) (varying from a slight bulge to a 6-in. (15-cm.)-long vermiform process), arising from the anti-mesenteric border of the ileum about 2 ft. (60 cm.) from the ileo-caecal valve, the distance varying from 4 in. to 5 ft. (10 to 150 cm.). It is shaped as a cone or a blunt cylinder protruding at a right angle, or more rarely at an acute angle from the intestine. Ileal mucosa lines its interior, but duodenal or colonic mucosa may also be found, and gastric mucosa is present in 16% of necropsy specimens (Schaetz, 1925). In the clinical material, however, gastric mucosa is encountered in two-thirds of the cases recorded (Schullinger and Stout, 1934; Bussey, 1938; Montant *et al.*, 1950). The French designation "petit estomac" is explained by these facts. Heterotopic pancreatic tissue may also be found.

Infection

Acute inflammation of Meckel's diverticulum, sometimes caused by foreign bodies, gives clinical symptoms and signs quite similar to those of appendicitis.

Case 1

A 5-year-old boy was admitted to Surgical Department A of Frederiksberg Hospital on March 30, 1952, with a diagnosis of appendicitis. He had been treated in the medical department for abdominal pain some months before. There had been short