

REACTIVE PSYCHOSIS IN ADOLESCENCE.

By WILFRID WARREN, M.A., M.D., D.P.M.,

Physician, Bethlem Royal and Maudsley Hospitals ; Lecturer, Institute of Psychiatry ;

and

KENNETH CAMERON, M.R.C.P.E., D.Psych.,

Physician, Bethlem Royal and Maudsley Hospitals ; Lecturer, Institute of Psychiatry.

THE period of adolescence includes within its span the shorter phase of puberty, and may extend from prepuberty as early as ten years (1) to adult maturity attained perhaps in the early twenties. A study of psychosis in adolescence must therefore take cognizance both of the psychoses of later childhood and of early adult life.

PSYCHOSES IN CHILDHOOD AND ADOLESCENCE.

The earlier accounts of the psychoses in childhood are confused by the fact that children from infancy to sixteen or more have sometimes been included in the same series. Prior to puberty psychoses are rare, though more frequent than has sometimes been claimed (2). Nomenclature has also been, and remains, confused by uncertainty as to those entities in which primary organic degeneration is present (3). Lay's (4) review of the earlier writings gives a comprehensive *résumé* of these problems.

The modern concept of schizophrenia in childhood was first formulated by Potter (5) and he established definite criteria for its diagnosis. Bradley (6) later reviewed the subject fully. Bender (7), using strict and careful criteria, further defined and clarified the clinical picture and Kanner (8), (9), later differentiated the condition of "early infantile autism."

The earliest onset of schizophrenia is uncertain, but it may appear in very early childhood. Lutz (10), reviewing the literature up to 1937, could find only ten children in whom the diagnosis of undoubted schizophrenia was made before the age of six, and ten more in whom it had appeared by the tenth year. Kanner (11), however, states that it can occur in the first six months of life. Its course is, on the whole, insidious and prolonged, carrying an ominous prognosis, particularly in younger children.

Little is known of the incidence and course of manic-depressive psychosis prior to puberty, apart from its extreme rarity : cases suggesting this condition have all been over ten years old. Diagnosis is fraught with difficulty, and again, organic conditions, including encephalitis, have to be excluded. Most instances described have been in adolescent children over thirteen, but Kasanin (12) stated that they carried an ominous prognosis.

With puberty there is an immediate rise in frequency of cases of schizophrenia, and this rise steepens in the next decade (13). Manic-depressive

psychosis also becomes more common and schizo-affective states are not infrequent. Subsequent to puberty, psychoses usually approach an adult form and can more easily be perceived and diagnosed in adult terms. Therefore, although no artificial separation can be made at puberty between those psychoses that occur in earlier childhood and those that occur in adolescence, there is, in general, this qualitative change in their symptomatology. The physiological and psychological changes of puberty also constitute intrinsic and extrinsic etiological factors of importance in the subsequent development of a psychosis, although difficult to estimate in the quantitative sense (14).

EPISODIC PSYCHOSES IN CHILDHOOD AND ADOLESCENCE.

In contrast to the general view, that psychoses in children have a prolonged course, some later authors have pointed out that there may be an acute onset and a short stormy course, abating in a few weeks without usually complete recovery and with varying degrees of impairment. The acute phase may be repeated with further deterioration. Despert (15) described twenty-nine such children, of whom nine were below the age of seven, and twenty between the ages of seven and thirteen. Kanner (2) also distinguished between cases of insidious and acute onset, and stressed that the latter usually occurred in older children. Although schizoid features may have previously been present, many such children appeared normal to relations, who often described them as model children owing to their studiousness, submissiveness and obsessive drive for perfection.

He stated that in such cases there was frequently a relatively sudden drop in scholastic efficiency with diminished powers of concentration, and complaints of headache or other physical discomforts. This prodromal stage was followed by a turbulent psychotic condition with acute anxiety, sleep disorder, motor restlessness, disturbance of speech, occasional hallucinations, general perplexity, bizarre bodily sensations, and loss of contact with people in the environment. Such an episode, often precipitated by physical illness, operation or a major emotional upset, lasted a few days or less and gradually tapered off, though occasionally it acted as a "catastrophic reaction" from which the patient never recovered. Sometimes there was a return to the prepsychotic mode of living, but very often the remission represented merely a "recovery with defect," and was followed by other acute episodes, each of which left the patient with a further reduction of his ideo-affective activities.

While some episodic psychotic states in adolescence can readily be diagnosed in the terms described above, not infrequently cases are difficult to classify, and this indeterminate quality has recently been emphasized by Edelston (22). Childers (16) described episodic states in children between the ages of ten and sixteen, precipitated apparently by physical or emotional trauma in children of the "schizoid reaction type." These children often showed an unusually strong attachment for the mother, perhaps over-compensatory; they had often been much away from other children and given to excessive phantasy. They might show an unusual position in the family and their circumstances were always unsatisfactory.

Other authors have briefly mentioned similar indeterminate episodes, including Vogt (17), Cottingham (18) and Creak (19). The last described three children aged between eleven and twelve, whose condition seemed to have a strongly reactive element to events of emotional significance in the environment. Lutz (10) called such cases pseudo-schizophrenia, in that they were not progressive and appeared to have the prognosis of the provoking factor. Some authors including Van der Horst (20) stressed that these episodes occur about puberty or in adolescence, and has suggested that they are peculiar to this time of life.

Kasanin and Kaufman (21) analysed twenty-one patients previously diagnosed as schizophrenia, all between the ages of thirteen and fifteen, admitted to the Boston Psychopathic Hospital. This analysis revealed that only six of them could be definitely confirmed as schizophrenia, and two more as schizophrenia engrafted on mental deficiency; the others they considered included two cases of psychosis grafted on psychopathic personality, one case of traumatic psychosis, two of toxic psychosis and two of "psychosis with hysterical manifestations." In addition they distinguished five cases, four girls and one boy between the ages of fourteen and fifteen, to whom they gave a diagnosis of "reactive psychosis." These patients showed a peculiar but definite emotional response to a particular situation, and such an atypical response had led to the previous diagnosis of schizophrenia. They had, however, all had obvious precipitating emotional traumata, and the illness did not appear to be malignant, in that a perfect recovery ensued and they remained stable afterwards over a prolonged period. They added, however, that in two of the patients there was an affective colouring to the illness, which may have been partially responsible for an apparently benign course.

The authors suggested that such reactions in children were quite different from the responses in adults, and what would seem an extremely serious and malignant reaction in an adult might be fairly intelligible and matter of fact in a child. It was perhaps a building up of phantasy life with expression in symbolic, and sometimes queer, behaviour. With such small numbers it was difficult to distinguish any special etiological factors, but it seemed definite that their heredity was less serious than in those patients with a definite schizophrenia or manic-depressive psychosis. The home situation was very poor, in the emotional sense, in all five cases, but the effect of this was not clear. Sexual preoccupations and difficulties were also prominent in them. The authors stated that previously these patients had only been seen in cross-section, and there had been no earlier opportunity for a full evaluation of the data. They stressed broad similarities in many cases and that there was fading of one case into another.

Detailed study, and particularly of the facts elicited during psychotherapy, is important for the further understanding of such patients.

PRESENT INVESTIGATION.

The authors have selected six cases between the ages of eleven and sixteen who showed brief psychotic episodes. These appear to be similar to the groups

described by Childers (16), and named by Kasanin and Kaufman (21)—“Reactive Psychosis of Adolescence.” In addition, our findings in these patients are in some ways akin to the older children described by Kanner (2) and regarded by him as having an episodic form of schizophrenia. Thus a “model child” background—more clearly seen in the boys—and the evidence of a prodromal phase followed by an acute onset were all described by Kanner. Our cases did not, however, end in impairment or schizophrenic defect, as described by him, but recovered or adapted at a better level than before the illness, as Kasanin and Kaufman (21) noted. Prolonged follow-up will be needed to determine their ultimate prognosis.

CASE RECORDS.

CASE 1.—K. V—, a boy of eleven, prepubescent, of a chubby build, was admitted in an acute state of panic. The illness had started six weeks earlier with sleeplessness, fears of burglars at night, and generalized apprehensiveness by day; with fears of his father's unemployment, of blackmail by a maternal uncle, that his mother and elder sisters were debauched, and that neighbours and children outside were trying to keep him awake. The initial acute phase had subsided in three days, but mild irritability and anxiety had persisted. A second acute phase then supervened, in which he was admitted. He was restless, overactive, importunate for reassurance but unable to trust anyone, repeatedly bursting into tears. He complained of dirty thoughts, feared his penis was to be operated on, that the nurses would poison him, and believed that hospitalization was a plot of his uncle's. His thoughts were so vivid that they “talked to him,” saying, “You'd better get out of this. It is an asylum, Keith.” With rest, sedation, free fluids and reassurance, the acute phase cleared up in a week; residual anxiety was relieved by discussion of sexual difficulties. Later, as an out-patient, he showed recurrent phases of mild depression and anxiety with the gradual emergence of psychosexual preoccupations over a long period, yielding to cautious interpretation. Considerable adjustments to his home and education and work with his parents were also required.

Three years later he had grown into a well-built youth, happily involved in a family unit of manly interests, his growing masculine confidence betraying itself in a mild attack of calf love.

The more intimate study of the case revealed a psychosexual pattern of response to maternal overstimulation, an ambivalent attitude to a mild father and an aggressive uncle whom he admired and dreaded. There was also evidence of masturbation fears, incestuous impulses towards his sisters, and castration fears,

The family history was not good. The mother, aged thirty-nine, was occasionally depressed. A maternal uncle was moody and aggressive, with periods of anxiety and depression. Another maternal uncle had been, since adolescence, in a mental hospital. The father, aged forty-five, was a mild, rather inadequate personality. The parents were attached to each other, but there were many stresses in the relationship. The mother, intelligent, ambitious and forceful, regarded the father with affectionate contempt, barely concealing a greater respect for her aggressive, prosperous and somewhat dubious brother—the villain of the patient's phantasies. The patient, an only boy, was younger by six years than his two sisters. The mother, lavishing her warmth and ambition on her family, had initially not wanted the third child, but from his birth had made him her favourite. As a child he had been docile and contented; passed the milestones normally; he was evacuated at four with his sisters for eighteen months, and again towards the end of the war for six months. He was of high average intelligence (Stanford Binet I.Q. 125 approx.). His school career had been good; he was near the top of his class, valuing success and the approval of the teachers, but rather timid and solitary with contemporaries. Up to the onset of his illness he had slept in a bed in his parent's room, getting in with his mother in the mornings. About six months prior to his illness he had begun to worry about erections and genital play, stimulated by the talk of fellows at school. He had been rather crudely enlightened

by his father with analogies from domestic animals. At the same time he learned, through an aunt, of his mother's recent miscarriage. There had been some quarrelling with the aggressive uncle, who had made threats against the father. At school he was trying to stand up to some bullying. The acute illness was precipitated by his mother's entry into hospital for a gynaecological operation. During this time he had slept with his father but was very disturbed, and the acute phase leading to admission followed.

CASE 2.—J. K—, a boy of 13½, still prepubescent, was admitted some months after an acute psychotic episode. Emotional disturbance had followed a circumcision seven years earlier, since when he had been afraid of hospitals and of strangers, and had been nervous and fidgety. The acute psychotic episode had supervened at a schoolboy camp, where he was reported on as having become excited, wandering about "in a dream," and answering irrelevantly; he expressed dread of dying, showed great fear, covered his eyes and shuddered, walked with a rigid jerky gait, giggled excitedly and frowned. These had subsided in a week, but he had remained clumsy and inco-ordinated, garrulous and almost incoherent, and his school work had deteriorated. He was irritable at home, aggressive towards a young sister and had periods of "absence."

Admitted some months after the acute episode, he was restless and inco-ordinated in his movements and extremely self-conscious. Speech was almost inarticulate with garrulous rushes of talk and incoherent attempts to explain his feelings. Orientation was correct and there was no clouding of consciousness. He complained of unreality, odd feelings in his head, was hypochondriacal about his physical health, deplored his small genitals and feared they might disappear. Further interviews revealed intense castration fears almost directly expressed, or emerging in somatic or psychic phantasies of loss of arm and leg, preoccupation with excision or cuts, dreams of a man having his head crushed or injured, a sense of his body being small and weak, and a feeling of worthlessness and ineffectiveness. Imagined threats from his father, policemen or other boys were interwoven with this theme. He formed a good relationship with a woman psychiatrist, and therapy was of an analytical character. At first a generally passive attitude towards men was prominent, and with exacerbations of anxiety there emerged a disintegrated preoccupation with the female body; but after six months there was an increase of self-assertion and security.

The mother, aged thirty-seven, was detached, unemotional and unapproachable. There was some evidence of marital disappointment and overprotectiveness of the patient. The father, aged forty-eight, was tense, irritable, well-meaning but unsympathetic and dominating. A young sister had been born when the patient was ten. The patient was full-term, placid and easy to bring up. Habit training was firm. Thumb-sucking occurred in the earlier years, and he was demonstratively overaffectionate. A series of childish illnesses had involved hospitalization twice before six. Masturbation was reported about this time. Following circumcision at six, he was in terror at finding his genital bleeding, and this fear persisted. During air raids he had developed functional abdominal pain and vomiting. He had a good scholastic career (Stanford Binet I.Q. 111). His only friend, however, was a girl cousin, and his mother kept him from the roughness of boy scouts. The birth of his sister caused no apparent disturbance, but subsequent to his acute phase he showed jealousy of her. Prior to going to camp he had joined an ambulance class and asked for sexual enlightenment. At camp he reported sexual talk and genital play, and alleged he had overheard a plan to put bootblacking on his genitals.

This youth was constitutionally timid and immature, and the mother had not created a secure relationship. The effects of several periods of hospitalization, the gross trauma of circumcision, and the failure of the father to play a normal role had resulted in an only partially successful childhood. This adaptation had broken down under incipient puberty and sexual enlightenment. The separation from home and the close association with boys who made further threats had precipitated the acute episode. The final outcome is not yet established.

CASE 3.—T. G—, a girl of 15½, normally developed, one year past menarche, was admitted after an acute psychotic episode following appendicectomy. The appendix had been gangrenous and she was treated with drainage and penicillin, but physically her post-operative state had been good. There was the usual slight

pyrexia in the first forty-eight hours. For a month or two previous to the operation she had had depressed moods when she would sit and weep. The operation had been precipitated by an attack of abdominal pain, and when removed to hospital she had been tearful and distressed, calling out for her mother. Twenty-four hours after the operation she seemed weak and distressed, but that evening was well, recognized her family and talked to them. She called her father back and told him there was something she should tell him, but he "would not like her if he knew." She was coherent and orientated. The following day she "seemed to have lost her memory," failed to recognize her parents, refused food and wandered round touching things, occasionally tearful or humming "Nuts in May." For some days she alternated between restless excitement and apathy, settling into a childish, facile state. After transfer to the Maudsley Hospital some six weeks later, she became settled and peaceful, but retained a childish, labile mood recognized by her parents as not normal. The scar was healthy and blood examination, etc., showed no evidence of sepsis. She remembered the post-operative period but denied refusing food, etc. She had several attacks of breathlessness. Eventually she established confidence in her psychiatrist and described her illness as starting three years earlier, when she had returned from evacuation during the war years with her mother and sister. She disliked the house and neighbourhood, felt cramped, hated school (I.Q., Wechsler 85—not reliable), was depressed and hopeless, afraid of the dark and particularly of a dark cupboard in the house. Further back, from the age of seven, she had had attacks of "asthma" when she and her mother had visited her father in London. There was now general improvement, and she next described how sexual problems had worried her since she was ten. Subsequently she reverted to normality, and remained well and cheerful and was at work six months later.

Her family history showed no psychopathy. The mother, aged forty-four, was garrulous and excitable; the father, aged forty-two, mildly domineering. The patient, eldest of three, was notably the father's favourite. Her birth was normal full-term, and she was breast fed. As a child she was a nailbiter and afraid of boys. Information about menstruation, which first occurred at 14½, was picked up crudely at school; she worried about its delay in onset as compared with other girls. In the year prior to operation she had once been followed by a tramp, and on another occasion she and her sister were pursued by youths who had caught up with her sister, when the father, summoned by the fletcher patient, drove them off.

The illness was summed up by the patient—"I think it was all growing-up and having those worries." Her attachment to the father was significant. In addition, her slight intellectual handicap made educational progress difficult; return to an uncongenial town life, and the tensions of puberty so heightened a disturbance of years that her acute phase supervened with appendicectomy.

CASE 4.—I. V—, a girl of thirteen, was seen as an out-patient after an acute psychotic episode at a girls' camp. She had behaved strangely and irresponsibly, with alternating moods of depression and excitability. She accused her friends of talking about her, walked in her sleep, and after a horrific film made several attempts to run away. Having been sent home she was admitted to an observation ward where she was said to hallucinate "whispering voices." Transferred to a mental hospital she was promptly discharged as an "unhappy child." When seen at the Maudsley Hospital, some weeks later, she was found to be a slight, pale child, timid and depressed, responsive to encouragement but uncommunicative. Work was mainly with the stepmother, but impaired by the distance travelled. After some months the child was brighter, more communicative and now showed pubertal development. She returned to school, where she was reported bright and spontaneous. A year later she was working in a factory. An I.Q. of 65 (Stanford Binet), as an out-patient, was regarded as unreliable owing to the patient's disturbance.

Her history showed a normal birth, but when the patient was four the mother was admitted to a mental hospital with paranoid schizophrenia. In the absence of the father on war service, the patient was brought up in the casual rough-and-ready household of an uncle. She showed much attachment to her father on his leaves, and knew of her mother's hospitalization. A year before the patient's illness the father contemplated remarriage and the child then stayed with her new stepmother, a widow with one child. Subsequently, four months before

her illness, severe domestic difficulties developed. The stepmother did her best, but was tense, over-anxious, rigid and old-fashioned in her ideas. They lived above the late foster-parents, with friction and divided loyalties for the patient. The latter was jealous and possessive of her father, "pushed" between him and her stepmother, and scandalized the latter by her blatant affection. Finally, the patient maintained that her own mother was being shut up and might have returned to them. A school camp was welcomed by the stepmother and interpreted by the child, with some correctness, as an effort to get rid of her. There was no information of any trauma at camp.

Knowledge of this case is incomplete, but it illustrates an acute psychotic episode in a maturing girl related to severe interfamilial stress and precipitated by a school camp. Full recovery took place.

CASE 5.—B. T—, an adolescent girl of 15½, normally developed, the only child of elderly parents, was seen as an out-patient following a holiday during which she had had an acute psychotic episode. She was later admitted for closer observation.

Menarche had occurred two months before the illness; she was at the time studying hard. She had since thought children were looking and shouting at her because she had continued at school. On holiday in Ireland with her parents she felt depressed and tired, and was reported as excited, restless and sleepless. She then went by herself to stay with the aunt in Ireland with whom she had been evacuated. She felt she had done wrong to leave her parents, and set out to walk back. On the way she saw men near a church and decided they were watching her. She became distressed, wondered if the church had been built for her, but felt she had lost her religion, though later she thought that she was to be martyred—cut up and put on a fire—and would return as a ghost and save the people. She then saw ghosts in the church who said, "You will soon be with us." Finally, she considered that she was stupid and then losing touch "felt confused." Returning to her parents she thought her mother had "jealous eyes." On the way back to England she felt like jumping overboard, but thought she would be rescued. In her home she remained vague, puzzled and detached. Seen at the Maudsley Hospital three weeks later, she complained at first only of backache, but was able to describe the above experiences with hesitating insight. She believed she had had an illness that had left her rather weak and made concentration difficult. In the subsequent months she remained passive and detached, and said that at her period she had had a recurrence of the feeling she was in purgatory. Finally admitted to the hospital three months after the holiday, she appeared happy in the ward, and no abnormality was found in her behaviour or mental content. She returned home and to school. Further contact was difficult as her parents were defensive and resented the association with hospital, but her mother reported her as idle and withdrawn. A home visit revealed a tense situation, in that mother and daughter appeared to be covertly jealous of the other in relation to the father, a suspicious overbearing man.

The family history was relatively stable. The father, aged sixty-one, had developed neurasthenia after the first world war. The mother, aged fifty-four, was somewhat nervous and anxious. The family interrelationships were difficult to assess. Both Irish and Roman Catholic, the parents led a life isolated from their neighbours; the father apparently dominated the situation, the mother's attitude suggested hostility to the daughter under a cloak of amity.

The patient had a normal full-term birth and was breast fed. She was described as a restless, active child, but shy, making only one close friendship. Sleepwalking had occurred. School had been relatively successful till fifteen, but this had involved very hard work (I.Q. 76, Wechsler full scale). The family ambition was that she be a teacher.

As far as can be judged stresses lay in the family situation to which she returned after years in Ireland, in educational pressure and the developmental stresses of puberty. The immediate recovery from her psychosis was good, but the emotional situation was little affected by psychotherapy.

CASE 6.—I. N—, a girl of thirteen, fully developed, was admitted to hospital with the history of an acute illness which had lasted three weeks, and had been precipitated by the departure of her mother on holiday, leaving the patient at home with the father and grandfather. She had awakened with the smell of "gas,"

said someone was breaking in, and wandered round the house. Fear at night persisted after her mother's return and she disturbed the household. The smell she associated with dental gas during an extraction a few months before. On admission she was depressed, tearful, but quickly became settled in hospital though she long remained anxious, unwilling to meet the outside world, and occasionally depressed. With psychotherapy she gradually revealed an interest in and fear of men, particularly her father. She described choking feelings when left alone with him, and dreaded that he might hit her. Eventually she produced phantasies of intercourse with him.

At first dependent on her mother, she expressed great distress at the worry she caused her, but her actions might easily have been regarded as designed to augment that worry. She finally realized this hostility to her mother and jealousy of her next sister. She eventually emerged with psychotherapy as cheerful, a good mixer, rather the dominating spirit in the ward, and was able to return home with success.

Her father, aged thirty-five, was stable, while her mother, aged thirty-six, was nervous but warm-hearted. Marital relations were good, with occasional mild rows. The patient was the eldest of three daughters. She was full-time normal birth, breast fed. She was always nervous and afraid of the dark. Tonsillectomy in hospital at three caused no great upset. She was always slightly jealous of her next sister, born just at this time. During the war she was evacuated to the country with her mother—at that time she used to run away to find an uncle who lived near. At school she made only transient friendships with other girls, but liked teachers and got on well (Wechsler Bellevue, I.Q. 100). She had been afraid at the birth of the third and post-war sister, fourteen months before her illness, but was delighted with the baby. Menarche at twelve caused some worry. The dentist who had extracted her teeth with gas had been "a nice man," but the smell was also associated with a man who she thought had looked at her at a cinema. She was afraid of men.

This girl showed emotional disturbances dating back to the birth of a younger sister when she was aged three. Puberty had coincided with the reintegration of the family and the birth of the third sibling, and the illness had been precipitated when the mother had left her in the house alone with the father.

DISCUSSION.

Several observations of interest emerge from these case records.

The family histories were not uniformly bad; two, it is true, showed psychosis in the immediate background, but in the other four nothing more than moderate anxiety showed in the two previous generations. The marital relations of the parents were significant—in all they were formally stable, but in the case of both boys the mothers were not emotionally satisfied in their marriage, and the boys appeared to be unduly involved in the maternal pattern of life. In the case of each of the girls the parental relationship appeared more complete, but three of the girls were spontaneously described as being particularly attached to the father: the fourth (Case 6) showed in her content the attachment to the father more manifest in the other three. The significance of this triangle was enhanced by the rather specific position held by the patients in the family pattern. The two boys were respectively the youngest and eldest of a family, of whom the other members were girls. Two of the girls were first-born and the other two only children. In every case developmental stresses were enhanced by an undue attachment to the heterosexual parent.

Differences which may be fortuitous appeared between the sexes in intelligence level. Both boys were above average intelligence, while the girls were rather below. All six, however, were more deeply involved in the educational process than the majority of children. The boys tended to excel in the scholastic sphere, and the girls consistently to maintain a higher position in

school work than their intelligence would justify. In all, desire for approval and fear of criticism by teachers were strong motives. This compensated for a general failure to achieve normal relations with contemporaries; shown in the boys by their being unusually "good" children, and in the girls by a degree of shyness and timidity that made for similar isolation.

In general the attack coincided, in the boys, with the early phases of puberty, when erections and awakened sexual interest coincided with the breakdown of the more passive pattern. In the girls the attack tended to be associated in time with the onset of menstruation. The precipitating factor was surprisingly uniform: in each case it was associated with temporary separation of the child from the mother, parents or home circle.

A prodromal phase of disturbance occurred in all of the cases in the weeks prior to the acute episode, but in two (Cases 2 and 3) this prodromal phase, and indeed the acute episode, were clearly seen as exacerbations of a personality disturbance that had existed for years. The prodromal phase proper lasted for several weeks and showed the features of anxiety—psychic and somatic—of depression and, less frequently, mild excitement.

Anxiety, sometimes intense, was uniformly present in the acute phase of the illness. Depressive characteristics emerged strongly in Case 1, who in his previous personality was a boy of sensibility, warmth and good affective rapport and who in convalescence showed recurrent depressive phases. Case 3, described as warmhearted and popular, similarly showed depressive phases prior to the acute episode; depression was also strongly present in the illness and convalescence of Case 6. While depressive features may be traced in the other three cases, the excitement, the thought disorder and much of the content had a schizophrenic colouring, particularly in Case 5. Finally, the acute phase supervened in most, subsequent to days or weeks of tension, restlessness and sleeplessness, so a toxi-exhaustive factor could not be excluded from the colouring of the clinical picture. In the post-operative case (3) this element was clear. It was only, however, in the most acute cases (Cases 3 and 5) that an actual loss of sense of time and place occurred.

The content of the acute phase constituted an emergence into consciousness of hitherto unconscious material of so dominating a character that it led to delusions or hallucinatory experiences. It was uniformly found, however, in these cases that affective contact was not lost and that personality disintegration did not occur, so that they remained susceptible to psychotherapy. In retrospect the situation and emergent material were found to explain the illogical content and to demonstrate the mechanisms at work with a completeness seldom met with except in the films. The well retained personality and affective rapport after the acute phase, and the relative simplicity of the connection between the situation and the content, are regarded as characteristic of this group of cases.

The hallucinatory experiences described were recognized by the subject as endogenous. Thus Case 1 said his "thoughts were so vivid they talked to him." Case 6 complained of the "smell of gas," but later said it was "a peculiar feeling as if there were gas about." Similarly, Case 5, in describing her ecstasy-like experience, retained insight to say later "I *thought* I saw ghosts in the church, and the voice of the loudspeaker *seemed* to be saying . . ."

CONCLUSIONS.

In conclusion the authors confirm, on the basis of these cases, that acute psychotic episodes may occur in adolescence, that severe anxiety is characteristically present and a depressive colouring frequent; that ideas of self-reference of delusional intensity and hallucinatory experiences may be present; that, nevertheless, disintegration of the personality does not necessarily occur, and good affective rapport may be established after the acute phase; that the cases may recover spontaneously or ultimately show a very good response to psychotherapy. The psychotic episode is usually determined by marked situational stress in an adolescent undergoing severe psychosexual conflict often related to an undue attachment to the heterosexual parent. They would adhere to the term, "Reactive Psychosis of Adolescence," as used by Kasanin and Kaufman (21) to designate these cases.

The authors wish to express their thanks to the colleagues whose cases provided the material for this study.

REFERENCES.

- (1) DEUSTCH, H. (1946), *Psychology of Women*, Part I. Research Books, Ltd., London.
- (2) KANNER, L. (1948), *Child Psychiatry*. 2nd edition. Blackwall, Oxford.
- (3) CLARDY, E. R., *et al.* (1941), *Psychiat. Quart.*, **15**, 100.
- (4) LAY, R. A. Q. (1938), *J. Ment. Sci.*, **84**, 104.
- (5) POTTER, H. W. (1933), *Amer. J. Psychiat.*, **89**, 1253.
- (6) BRADLEY, C. (1941), *Schizophrenia in Childhood*. New York.
- (7) BENDER, L. (1947), *Amer. J. Orthopsychiat.*, **17**, 40.
- (8) KANNER, L. (1943), *The Nervous Child*, **2**, 217.
- (9) *Idem* (1944), *J. Pediat.*, **25**, 211.
- (10) LUTZ, J. (1937), *Schweiz. Arch f. Neurol. u. Psychiat.*, **39**, 335, and **40**, 141.
- (11) KANNER, L. (1949), *Amer. J. Orthopsychiat.*, **19**, 416.
- (12) KASANIN, J. (1931), *Amer. J. Psychiat.*, **10**, 877.
- (13) DAYTON, N. A. (1940), *New Facts on Mental Disorders*. Illinois.
- (14) WARREN, W. (1949), *J. Ment. Sci.*, **95**, 589.
- (15) DESPERT, J. L. (1938), *Amer. J. Psychiat.*, **12**, 366.
- (16) CHILDERS, A. T. (1931), *Mental Hygiene*, **15**, 106.
- (17) VOGT, H. (1909), *Allg. Ztschr. f. Psychiat.*, **66**, 542.
- (18) COTTINGTON, F. (1942), *The Nervous Child*, **1**, 172.
- (19) CREAK, M. (1937-8), *Proc. Roy. Soc. Med.*, **31**, 519.
- (20) VAN DER HORST, L. (1938), *Psychiat. Neurol. Bl. Amst.*, **42**, 908.
- (21) KASANIN, J., and KAUFMAN, M. R. (1929), *Amer. J. Psychiat.*, **9**, 307.
- (22) EDELSTON, H. (1949), *J. Ment. Sci.*, **95**, 960.