

THE CLINICAL SIGNIFICANCE OF OBSESSIONS IN SCHIZOPHRENIA*

By

ISMOND ROSEN, M.D., D.P.M.

Senior Registrar, The Maudsley Hospital, London, S.E.5

It is well known that obsessive-compulsive symptoms may occur in the prodromal phase or in the course of schizophrenia, and that schizophrenic symptoms may supervene in a long-standing obsessional neurosis. Stengel (1945) has reviewed much of the earlier literature concerning the relationships between obsessional neurosis and schizophrenia. The question whether obsessional neurosis could develop into schizophrenia has often been discussed. Pilcz (1922), Legewie (1923) and Schneider (1925) distinguished between genuine obsessions which were symptoms of an obsessional neurosis, and symptomatic obsessional ideas which could occur in various conditions. These authors, as well as Stekel (1950), doubted whether a genuine obsessional neurosis could develop into schizophrenia. Bleuler (1911) thought that some patients suffering with chronic obsessional symptoms were in fact schizophrenic, especially where a schizophrenic psychosis had been observed in the family. Mayer-Gross (1932) expressed the view that cases of obsessive-compulsive neurosis existing over decades without change and presenting marked autism were often schizophrenics. Together with Bleuler, Mayer-Gross suspected that many of Janet's "psychasthenic" patients had been schizophrenic. Janet (1903) had observed 3,000 cases of psychasthenia, of which 12 developed into psychosis, and two into hebephrenia, but Janet's psychasthenia probably included cases other than obsessional neurosis. There is a well-known case which showed how in the course of a long-standing obsessional neurosis, paranoid schizophrenic symptoms may make their appearance. This is the patient described by Freud (1918) in "The History of an Infantile Neurosis", who, many years after he had been treated by Freud for obsessional symptoms, was treated for a paranoid state by Ruth Mack Brunswick (1928).

Jahrreis (1926) attempted to establish the incidence of obsessive-compulsive symptoms in schizophrenia. He perused the case notes of 1,000 schizophrenics admitted to the Munich University Klinik, and found that in 11 cases only, obsessional symptoms had been noted. He studied 16 selected cases and noted that in only five of them had obsessional phenomena been in the foreground of the clinical picture, and had tended to cause diagnostic difficulties at times in the course of the schizophrenic development.

Binder (1944, 1945) in studying the relationship between compulsion and criminality, surveyed 60 patients with obsessional symptoms in a number of Swiss mental hospitals. All of them had at some time of their development committed criminal offences. In 17 cases, psychotic development could be established. Binder distinguished between the elaborate psychogenic obsessional symptoms and what he called organic obsessional phenomena. He thought that if in persons suffering from obsessional neurosis, a schizophrenic or

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organic psychosis supervened, the obsessional ideas might be transformed into delusions and the compulsions into impulsive acts which could lead to criminal offences.

Stengel (1945) observed that obsessive-compulsive symptoms tended to prevent or retard disintegration of the personality in schizophrenics. Muller (1953) followed up all cases of obsessional neurosis admitted to the Psychiatric University Hospital of Zurich at least 25 years previously. He collected 57 cases in all. Of those, 7 had developed into schizophrenia, 2 were probably schizophrenics and 2 were manic-depressives. His study was particularly important as follow-ups over long periods are lacking in the literature, and because his material was unselected. He attempted to study the question whether there was any difference in the course of schizophrenia with and without obsessions. He particularly attempted to test the views expressed by Stengel on this point. Of the 7 schizophrenics, only 4 had to enter mental hospitals at some time, while 3 were still socially well adjusted. In all of them, including the 2 doubtful schizophrenics, the psychosis had progressed very slowly and insidiously. Like Stengel, he observed cases in whom a transient disappearance of obsessional symptoms was associated with a release of strong aggressive impulses. He also confirmed Stengel's observations that in the cases where obsessional symptoms of long standing had preceded the emergence of schizophrenia, the latter had taken a comparatively benign course, which was not found to be the case in those patients with a short history of obsessional symptoms.

The question of the transition of obsessional ideas into delusions has been discussed by different authors; it has often been assumed, that it should be far from rare, that the step from the obsessional idea to a delusion occurs, i.e. the belief that a thought content which was resisted does not originate in one's own mind but was put there by somebody else. However, it seems that this transition is a very infrequent occurrence. Some students of the problem do not seem to have observed it at all. Mayer-Gross does not mention it. Stengel (1945) observed that the instincts, desires and fears which the obsessional idea or compulsion served to suppress or control, and which often remained unconscious, sometimes appeared in consciousness by way of projection. It was not the obsessional idea or the compulsion that was projected but something that was represented by the obsessional idea in a distorted and often unrecognizable form. This happened in some patients of his material and in cases reported in the literature. Only in this sense could he confirm the statement that obsessions may change into delusions. On the other hand, Henderson and Gillespie (1944), and Gordon (1950) described cases where the direct transformation of an obsession into a delusion was noted as having taken place.

In this study an attempt has been made to contribute to some of the problems arising from the successive or simultaneous appearance of obsessional and schizophrenic symptoms. That this occurs can now be regarded as established, but this is about the only fact on which full agreement exists among psychiatrists. Its significance, however, for the course and prognosis of the schizophrenic illness has only recently come to be considered, and this problem is still very much in need of investigation.

The case material used in this study was the total number of schizophrenics admitted to the Bethlem Royal Hospital and the Maudsley Hospital, from 1 July, 1949 to July, 1953, who had at some time had obsessional symptoms. During the period surveyed there was a total of 5,467 in-patients admitted to the Joint Hospital of whom 848 were schizophrenics of all types. Among those schizophrenics there were 30 patients in whom obsessional symptoms

had been observed at some time. The cases studied, therefore, formed 3.5 per cent. of the total schizophrenic in-patient population.

Although the two hospitals do not serve a specific geographical area and can select their cases, it has always been the policy that the material should be representative of the distribution of mental disorder among the general population. It is, of course, true that the turnover of these hospitals, whose main functions are teaching and research, is greater than that of a mental hospital of the same size, but care is being taken too, that cases of long standing, irrespective of their prognosis, are admitted and studied before being sent to their local mental hospital.

The proportion of schizophrenics who at some time had obsessional symptoms found in this hospital population may appear comparatively large in view of the alleged rarity of this combination. This is possibly due to the fact that the case material was more thoroughly investigated than that available to most earlier writers on this subject.

Sex Incidence: There were eleven males and nineteen females in this group.

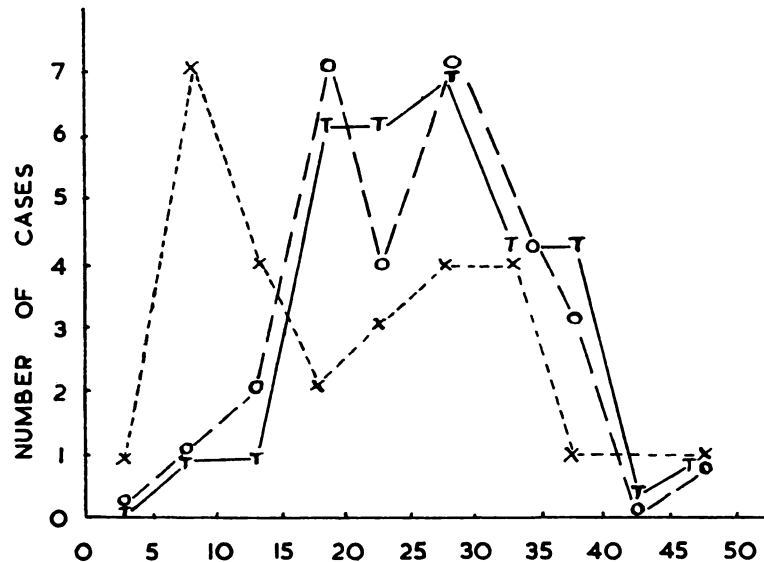


FIG. 1

AGE OF ONSET:

1. *Onset of obsessional symptoms:* From the accompanying graph (Fig. 1) it may be seen that there were two peaks of ages of onset. The first was in childhood and early adolescence. Eight cases developed symptoms before the age of ten years, a further six cases before the age of twenty. Eleven cases developed symptoms between the ages of twenty-one and thirty-five, forming the second peak.

2. *Onset of schizophrenic symptoms:* From the graph it will be seen that there was a major incidence of onset between the ages of fifteen to thirty-five. Twenty-two cases were in this group.

3. *Age of first psychiatric attention:* This followed closely the pattern of the schizophrenic symptom onset. The early obsessional symptoms had not received medical attention and were usually established retrospectively; five patients had had them for more than ten years before treatment.

Heredity: As this aspect was not studied *ad hoc*, the results were thought to be too unreliable for inclusion here.

Premorbid personality: Each patient was retrospectively scored for schizoid and syntonic traits according to criteria laid down by Bowlby (1940). Only fourteen cases gave evidence of having had schizoid personalities before the onset of schizophrenic symptoms, while the personality traits in the rest of the patients had been non-specific.

Mode of onset of illness: With regard to retrospectively establishing the first symptoms to appear, there is a difference in the accuracy with which this can be done for schizophrenic and for obsessional manifestations. Because schizophrenia often commences with a gradual behaviour change of which the patient is unaware, it may be difficult to note the initial symptoms. With obsessions, on the other hand, one of the essential features is the striking experience of subjective compulsion so that their onset can be established fairly precisely.

There were four main groups of onset symptoms. These were (a) obsessional only, (b) affective, (c) schizophrenic and obsessional symptoms and (d) non-specific disorders.

(a) *Obsessional only:* Eight cases, of whom one (case 9) had had touching rituals at the age of ten. Six patients had endured obsessional illness for longer than two years, four of these six had contamination fears. In one patient (case 13) a compulsion to shout out names had been present for a few months before the onset of schizophrenia. The following are extracts from the records of the six patients mentioned above. These extracts refer only to the obsessive-compulsive symptoms which had preceded the schizophrenic symptoms.

Case No. 2 had compulsive handwashing from the age of seven, for fear of contracting diseases from coins, and later developed a fear of V.D. This was diagnosed as a compulsive neurosis and lasted for twenty years almost continuously until the onset of typical schizophrenic symptoms. At times she sought reassurance from doctors.

Case No. 3, a girl of eighteen, had, at the age of eleven, had a phobia that her food might be contaminated, with corresponding compulsive precautions. Schizophrenic manifestations were apparent at the age of fifteen.

Case No. 21 developed a phobia of V.D. and a washing compulsion at the age of sixteen. Schizophrenic symptoms developed two years later.

Case No. 27 was afraid of giving a disease to someone, prayed to God, and performed atoning rituals in consequence. This commenced at the age of fifteen: schizophrenic symptoms made their first appearance when she was eighteen.

Case No. 10 had the compulsive thought that she might kill someone, starting at the age of fourteen: schizophrenic symptoms appeared at the age of eighteen.

Case No. 22 had the urge to look at men's genitals for two years before paranoid mechanisms became evident at the age of twenty-eight. Her life was disturbed by these initial symptoms.

Thus, in six of the cases, there had been persistent, stable and systematized obsessional symptoms lasting several years prior to the appearance of schizophrenic symptoms, with their onset in the first or second decades of life. The sexual and aggressive, or sadomasochistic, nature of these symptoms was noteworthy.

(b) *Affective:* In six cases, depression had been the first presenting symptom prior to obsessive and schizophrenic manifestations. Manic mood disorder was not observed in any case.

(c) *Both schizophrenic and obsessional symptoms at onset:* Nine cases. Ideas of reference were the commonest presenting symptom in these patients. Obsessions were present simultaneously in all, although the schizophrenic symptoms predominated from the start.

(d) *Non-specific behaviour disorders*: In seven cases, the first symptoms were general behaviour disorders which appeared to be non-specific at the time. In five patients, lack of concentration, social withdrawal, social difficulties, and apathy had been the principal features. The other two showed aggressive behaviour with rage and excitement in one and a quarrelsome, aggressive, hypochondriacal attitude in the other. It is interesting to note that all these cases showed obsessional symptoms prior to the onset of the more specific schizophrenic symptoms, so that signs which might have made the onset of schizophrenia more patently evident did not appear until later and left the true nature of the process in initial doubt.

Obsessional symptoms occurring for the first time after the development of Schizophrenia: In no case of this material did obsessional symptoms establish themselves after schizophrenic symptoms had appeared.

Types of schizophrenic reactions: In all the cases, the diagnosis of schizophrenia had been made or confirmed by experienced psychiatrists. In most cases several such persons had concurred. Twenty-six patients had paranoid symptoms as a feature of the illness sufficient to warrant the diagnosis of paranoid state or paranoid schizophrenia at some time or another. Of the remaining four cases, No. 11 was a case of hebephrenic schizophrenia which probably had developed out of a childhood schizophrenia. Case No. 20 was a juvenile schizophrenia. There were two cases of schizo-affective psychosis.

Most patients showed disturbances in several important spheres of mental functioning and there was no case which did not show the combination of at least two of the categories of thought, mood and behaviour disturbances. All patients except three had delusions. The exceptions were the two juvenile schizophrenias and one case with ideas of reference only. Hallucinations were present in nineteen cases. There was a change of social adjustment in all cases, while nineteen showed withdrawal of serious degree. Ideas of influence or passivity were present in nine cases. Thought disorder was present in six cases.

The Course of the Illness: The thirty patients were scored for the duration in weeks of stay in hospital, and the period of remissions out of hospital. The time spent in out-patient treatment prior to being admitted to hospital was not taken into account.

Phases in Hospital: Thirteen cases had only one phase in hospital, six cases had two phases, seven had three phases, three had four phases and one case was in hospital five different times. The average number of phases in hospital was 2.1 per patient. The average time spent in hospital was 63.7 weeks, the range being very wide, from one week to two hundred and eighty-nine weeks. Thirteen patients were in hospital at the time of follow-up. Of those, five had shown schizophrenic symptoms for less than two years.

Phases of remission: Remission was taken to be a stay of at least one month out of hospital. Ten patients had one such phase, eight had two phases, seven had three phases, three patients had four phases and one patient five phases. The average number of remission phases per patient was 1.7. The length of the remissions varied more widely than the duration of stay in hospital, as some patients were able to remain out of hospital for many years between attacks. In a few cases, these were up to four and eight years. The average total time spent in remission was found to be 143.8 weeks. Seventeen cases were in remission at the time of follow-up.

An examination of those patients who had been ill for longer than two years including remission, revealed the following. There were seventeen such patients. They had an average of 2.7 phases of illness with a mean of 87.9

weeks spent in hospital. They averaged 2.3 phases of remission of 232.5 weeks total. Eight of them were in hospital on follow-up, which was on an average of 6.1 years. Although this group had an average length of stay in hospital greater than the whole, their average phase of remission and length of remission were also greater, showing the maintenance of the trend towards periodic breakdown and remission.

Mental state at the time of Follow-up: The thirty cases were followed up for an average length of time of 5.3 years from the date of their first psychiatric attention or admission. One case was symptom-free. Eight were at home working: they had recovered with some defect. Eight patients were at home but not working. Six of the thirteen in-patients had had no remissions, but three of the latter had only been in hospital from 6 to 28 weeks.

Obsessional Symptoms in Relation to the Development of Schizophrenia: It was found possible to subdivide the cases into (A) those with obsessional symptoms which had been long-standing or present for over two years prior to the onset of schizophrenia. There were fourteen such cases. (B) Those cases with obsessional symptoms emerging just prior to, or within a year of onset of schizophrenia. Five cases. (C) Those cases with obsessional symptoms emerging coincident with schizophrenia. Eight cases. It was impossible to classify three cases because the onset of the obsessional symptoms was not known.

The fate of the Obsessional symptoms after the onset of Schizophrenia: The most striking and significant finding was that in twenty-three patients the obsessional symptoms persisted largely unchanged in content and degree of severity after the onset of schizophrenia. Of these, ten showed an increase in the severity of their symptoms at some time in the illness, the content remaining the same, while in six of them new obsessional symptoms appeared in addition to the others. In three cases, the obsessional symptoms receded into the background, this being a result of leucotomy in two. Six cases showed improvement in the obsessional symptoms with remissions of the illness generally, while in one other case they grew worse in remission.

Contents and Types of the Obsessional symptoms: These were classified into the four types of obsessional ideas, compulsions, phobias and ruminations.

Incidence: Among the thirty cases, the incidence of obsessional ideas, phobias and ruminations was about equal, there being fifteen cases in the phobic group and sixteen in the other two groups. Compulsions were more universally present and appeared in twenty-seven cases. The combination of symptoms revealed that seven cases had all four groups of obsessional symptoms, eight cases had three of the obsessional groups, eight cases had two of the groups, and seven cases had one group only.

CONTENT:

A. Obsessional ideas. There was usually one basic feature in each case, such as obscene word repetitions; sexual thoughts, mostly about intercourse; magical thinking; aggressive phantasies of killing or suicide, counting, or unspecified unpleasant ideas.

B. Compulsions: Here the groupings were more diverse. Compulsive washing and bathing were present in ten cases, touching rituals in four cases, looking rituals, vocal repetitions, prayer rituals and other behaviour rituals as well as destructive compulsions were present in 27 cases.

C. Phobias: In eight cases the fears were closely related to the obsessional ideas or impulses, with some further elaboration. However, they all fell into the categories of either sex or aggression or both.

D. Ruminations: These concerned ethics and morality, such as doubts as to good and evil, God and Truth, sex and others of a philosophical or magical nature.

The Transition of Obsessions into Delusions: Three possible ways of a transition of obsessions into delusions can be envisaged. There may be found singly or in various combinations.

(a) An obsessional idea, which has been experienced as arising from the self, is replaced by the conviction that it is planted into one's mind from outside. This would represent the well-known mechanism of projection; (b) The obsessional ideas, still experienced as such, may be experienced as caused by someone else; (c) The insight into the morbid nature of the idea becomes lost and the idea is held to be true, e.g. an obsessional fear of contamination becomes a belief in being poisoned.

Among the cases investigated, each of these three changes of obsessional ideas was observed. Six patients were found to have had a transition from obsessions to delusions. These were a combination of types (a) and (b) in three cases, while there was one case each of types (b) and (c) and their combination.

Transitions have not been considered to have taken place where obsessional ideas disappeared and were replaced by delusions, or co-existed with them for a time and then faded out. It seems that in the literature, this sequence had often been described as a transition.

The following four cases exemplify transitions of obsessional ideas into delusions.

Case No. 10: For four years, this patient had the persistent idea that she might harm someone. Suddenly at Communion she heard God's voice saying she might harm Him. She later developed bizarre rituals to placate God. The constant rumination of her killing someone persisted. She was not entirely convinced that the hallucinations were due to her imagination. The delusion that she could harm God distressed her and was seldom out of her mind. Although she believed this, she was aware of the absurdity of her rituals to placate Him. The combination of types (a) and (b) was seen in the obsessional idea being replaced with the conviction that it was caused by an outside source, but the idea still persisted in its original form.

Case No. 21: Fears of contamination and destruction through loose objects lying about gave rise to delusions of being poisoned and hallucinations of people falling off roofs and being pushed down drains. With regard to the hallucinations and delusions, he often admitted that these may have been the product of his imagination, but he could not convince himself of this fact. There was doubt in his delusions therefore, and the obsessional washing rituals and fears of contamination persisted with the belief that he was being poisoned. In this case one can speak of a transition from an obsession into a delusion. Fears of contamination gave way to a delusion of being poisoned and are an example of type (c).

Case No. 22: This patient's illness commenced with the compulsive urge to look at men's genitals which she resisted and felt to be absurd. The compulsion persisted throughout her whole schizophrenic illness and was less in intensity at times. Her delusions were centred around sex, and she believed that everyone knew she had the compulsions mentioned and that she had a dirty mind. However, the actual transition of the obsessional urge coming from within to being caused by outside influences did not occur. Obsessional word repetitions of swear words did however, give way to hallucinations where the same words were said by the voices; she believed people really said these things. Thus a transition of types (b) and (c) occurred in this patient.

Case No. 30: This patient had obsessional ideas in the form of words such as "Radar" and "Crime", which came into her mind from within, which she resisted and felt to be absurd. When schizophrenia developed she felt that someone was putting obscene thoughts and words into her head and these included those already mentioned as obsessional. These same words were used by the hallucinatory voices which harangued her. The words referred to her guilt over a sexual affair of long standing. Type (b) transition appeared to have taken place.

Depressive Symptoms: Twenty-five of the patients were clinically depressed at some time or another during their illness. Eleven had depression lasting several weeks as a feature of the onset of their illness. Diagnostic difficulties seemed to arise in the early stages as a result of this in some patients. One was called a psychopathic personality with depression, two others were labelled adolescent affective disorders, while, in the final diagnoses, the term schizo-affective psychosis was used in three cases because the affective features were so prominent. This diagnosis presupposes a predisposition to both schizophrenia and manic-depressive psychosis.

Suicidal ideas and threats were entertained by twelve patients, four of whom voiced them repeatedly. Three made suicidal attempts all of which were serious. One patient made more than a dozen serious attempts and finally hanged herself. Her depressive spells were associated with aggressive outbursts, obsessional rituals, delusions and hallucinations that she must die.

In this series, aggressive features were observed in ten cases, apart from patients with aggressive phobias, and the suicidal acts. These manifestations of aggression varied from bad tempers and quarrelsomeness to open attacks of a homicidal nature.

RESPONSE TO TREATMENT

1. *Insulin Coma:* Fourteen patients were given high dosage insulin comas which ranged from twenty-eight to sixty-three, the majority receiving forty comas. Of these, ten cases showed improvement immediately following treatment. One patient recovered. The improvement was only temporary in several cases, and was mainly related either to an increased ability to tolerate the delusions or a better social adjustment.

2. *Electro-convulsive therapy:* Twelve cases received E.C.T. of which five had two courses. The number ranged from three to thirteen treatments. Six improved but this improvement was short-lived. The effect on the obsessions was either nil or an exacerbation in two cases. In one case they disappeared for a few days after two courses.

3. *Psychotherapy:* (a) Psycho-analysis. Three cases underwent what would be consistent with intensive transference analysis. Case No. 2 had two and a half years analysis which improved her to the degree that she was able to work and then removed her venereophobia. The patient felt she had been greatly helped by the treatment. The other two patients had six months and four years treatment without any material change.

(b) Superficial or supportive psychotherapy. Nineteen patients received such treatment. It is difficult to judge the efficacy of such treatment in terms of the sustainment it affords the patient. Apart from four cases who were helped and improved by psychotherapy at the onset of their illness, the specific results attributed to psychotherapy of this type were poor.

Leucotomy: Of the four cases, three underwent the operation of bilateral prefrontal leucotomy and one case had a cortical under-cutting of Brodman's areas 9 and 10. All four were considered to have improved to some degree. The obsessional symptoms became less intense or disappeared, but they returned after a few weeks in one case and in another after fifteen months. The schizophrenic symptoms were relieved so that a social recovery ensued, but one of these patients became aggressive and domineering. There were relapses in two cases, but at the time of follow-up, three were out of hospital although defects were present.

DISCUSSION

Sex Incidence: Although there was a predominance of females in the ratio of nearly two to one, no conclusions can be drawn from this as the cases were not selected from a sample representative of the schizophrenic population. There is no other series of equal size in the literature. Of Stengel's seven cases, four were females.

Age Incidence: The age at which obsessional symptoms commenced in this series was found to have two peaks of incidence. The first was in childhood and puberty, and the second between the ages of twenty-one and thirty-five. Kanner (1948) states that "most authors differ with regard to the frequency of obsessions in children as compared with adults. Some state they are rare before puberty. According to others, 50 per cent or more of all adult cases can be traced back to the years of childhood." In this series, eight patients had obsessional symptoms before the age of ten, six others at puberty, or soon after. All these were typical obsessions, which in the majority persisted into adult life and formed part of the obsessional coterie in their psychosis.

Patients tended to seek psychiatric treatment only when the schizophrenic symptoms were manifest. This is in keeping with the observation that obsessional neurotics endeavour to cope with their obsessive-compulsive symptoms without medical help, and to keep them secret as long as possible (Stengel, 1956).

Premorbid Personality: In this series there were fourteen cases with schizoid premorbid personalities. These included the only five patients who were not reported to be clinically depressed during their illness. Only six of the fourteen cases were in hospital at follow-up. In this series, therefore, the presence of a schizoid personality was not associated with any special type of onset of obsessional symptoms or of the course of the illness, except that those patients who lacked strong affective responses were usually of this type.

Mode of Onset of Illness: It has been shown that the onset of illness revealed itself in four different ways. There were (a) only obsessional symptoms, (b) affective symptoms, (c) both obsessional and schizophrenic symptoms, (d) evidence of a non-specific behaviour disorder. A retrospective scouting of the case material showed that it would not have been possible to predict the development of schizophrenia before the appearance of schizophrenic symptoms, in cases belonging to types (a), (b) and (d).

Diagnosis: The diagnosis of these conditions presents difficulty, especially in the early stages of the disease when obsessional symptoms may be prominent and schizophrenic manifestations not fully established. The tendency is usually to regard the cases as being those of obsessional disorder with paranoid or schizoid features until definite signs of schizophrenia make their appearance. Where a clinician has seen a case only once, it may be very difficult to come to the diagnosis of schizophrenia as the symptoms, particularly the delusions, may be said, as in the Hoch and Polatin study, to "zig-zag over the reality line". This has led to them being called "pseudo-delusions" (Fenichel). The mood fluctuations which often colour the whole picture may also be misleading and lead to a diagnosis of atypical depression. In this group of cases, it is necessary even more than in schizophrenia in general to base the diagnosis on careful clinical observation covering a long period. Schizophrenic symptoms may be shortlived, and different symptoms apparent at different times. Evidence of "process" schizophrenia, such as feelings of influence or passivity, and schizophrenic thought disorder were present in fifteen cases. Twenty-six cases belonged to the paranoid reaction type. Prevalence of the paranoid reaction type was also observed by Stengel, who described in detail seven cases, five

of which were paranoid, while the remaining two were classified as simple schizophrenia. This author also stated that he found a similar prevalence of the paranoid reaction type among the schizophrenics with obsessional symptoms throughout the literature. He tentatively related this to the strong integrative features inherent in obsessional mechanisms, which favoured the emergence of reaction types in which personality disintegration occurred late or never.

The Obsessional symptoms in relation to Schizophrenia: In all patients obsessional symptoms emerged either prior to, or coincident with, the development of schizophrenic symptoms. In no case among the material presented did obsessional symptoms appear for the first time after the onset of schizophrenia. However, a patient has been observed outside this series, who suffered from a long-standing paranoid state of the paraphrenic type, who developed an obsessive symptom for the first time about ten years after the onset of his delusional illness. It suddenly occurred to him that he might kill his niece. This idea had all the typical features of a compulsive thought. While he had no insight into his delusions, he had no doubt about the morbid nature of the compulsive thought mentioned. This was only of a transient nature but it frightened him so much that he sought treatment. This observation suggests that the first emergence of obsessional symptoms in the course of schizophrenia is possible. Dr. E. Stengel has told me that he has seen schizophrenics who, following leucotomy operation, had for the first time shown transient obsessive compulsive symptoms.

Content and Types of Obsessional symptoms: The obsessional symptoms were found to be no different in content, to those commonly found in uncomplicated obsessional neurotics. A sexual or aggressive basis could be inferred in all of them, depending on the level of interpretation used.

In this study it was found that those patients who had the greatest elaboration of obsessional symptoms were also those who had the largest variety of obsessional manifestations of which four types were distinguished.

Those cases with three and four varieties of obsessional symptoms were therefore thought to be in a more favourable state as far as the schizophrenic illness was concerned than those with only one or two varieties of obsessions. The former had a better elaboration of symptoms, their personalities were better preserved during the schizophrenic illness, and at follow up a higher number of them were found to be able to work and live at home than among the others. The numbers of varieties of obsessional symptoms present in the individual were correlated with their duration prior to the onset of schizophrenia (Groups A, B, C). Those cases with one or two varieties of obsessional symptoms present were added together and totalled fifteen cases. There was an equal number of cases showing three and four varieties. Of the fifteen cases with one and two varieties of obsession, five patients belonged to group A, where obsessions had emerged at least two years prior to schizophrenia, and five were in group C where obsessions and schizophrenic symptoms had emerged coincidentally.

Of those fifteen patients with three and four varieties of obsessions, there were nine cases in group A and only three in group C. While the small numbers of cases precluded statistical verification, there does appear to be the following trend. The longer the duration of obsessional symptoms prior to schizophrenic symptoms, the greater the number of varieties and elaboration of obsessional symptoms. There seemed to be therefore, a positive correlation between the duration of obsessional symptoms, the amount of variety and elaboration they show, and the relative benignity of the schizophrenic illness.

This would accord directly with Müller's finding that the longer the duration of obsessional symptoms prior to the onset of schizophrenia, the more benign the illness tended to be. The relationship between the long-standing obsessional symptom and the presence of affective features has been previously pointed out.

Some general considerations regarding the relationship between Obsessional neurosis and Schizophrenia: This study confirms that obsessional neurosis is sometimes followed by schizophrenia. How often this happens, it is impossible to guess at from the observations presented here. However, Müller's recent follow-up, of which a preliminary report was available, suggests that this development is not all too rare. It depends on the views a psychiatrist holds about mental disorder in general and schizophrenia in particular, whether he will regard the sequence of obsessional neurosis and schizophrenia as the unfolding of a single development, or as the occurrence of two different reaction types in one and the same individual. This study cannot contribute to a decision on which one of the two views is the correct one. The clinical observations presented here are compatible with both. Thus if one takes the view that a predisposition exists to both obsessional illness and schizophrenia, then the obsessional predisposition may be of a particular type. In these cases the maximum amount of obsessional symptoms which they could produce may have been reached. This amount was seen to vary evenly in this series, from those patients whose obsessions were minimal and transient, to those with well-developed, long-standing obsessional neurosis. The evidence for the limitation lay firstly in the fact that in the majority of cases, the obsessional symptoms were produced prior to the onset of schizophrenic symptoms, and continued thereafter, secondly, that there was an even range of the number of obsessional varieties produced throughout the series of thirty cases.

It is postulated that the failure of the obsessional symptoms to meet the environmental stresses is due to the individual's limited ability to manifest them, and then schizophrenic symptoms, to which there is a predisposition, are released. It seems that the predisposition to schizophrenia must be very much more frequent among obsessionals than among the general population.

It is interesting to note that certain cases also produced other neurotic symptoms as well as obsessions.

The transition of Obsessions into Delusions: The observations made on six cases support those authors who have stated that transitions from obsessions to delusions do occur. Three possible ways were demonstrated by means of which, either singly or in combination, an idea changed its character.

Depressive Symptoms: It has been pointed out by Stengel (1945) that in obsessional patients who develop schizophrenia, depressive symptoms are frequently present. This has been borne out by this material. In twenty-five out of thirty patients, marked depressive symptoms were present at times. Stengel noted the absence of manic features in his series. This also applied to this case material except perhaps for one case in which hypomanic symptoms were possibly present for a short while. Stengel also pointed out that when obsessional symptoms occurred in a predominantly depressive setting, suicidal and homicidal compulsions could very frequently be observed. Suicidal threats were made by twelve patients of this material, two made suicidal attempts, one committed suicide. Acts of violence and aggression were found in ten cases. Mayer-Gross's observation that obsessions could turn into delusions at the height of depression was seen in one case of this series.

The presence of affective symptoms has been regarded as a good prognostic

sign in schizophrenia, and this may be another factor making for a comparatively benign course of schizophrenia in this and comparable series.

Response to Treatment: In assessing the effects of the various treatments employed in these patients, it must be borne in mind that the number of cases is too small to allow of any generalizations. It can be said that the results were unimpressive, and even poor, if one takes into account the natural tendency to spontaneous remission which these patients showed. However, this material does not justify the assumption that these patients were less accessible to treatment than other schizophrenics or obsessionals. The relatively poor effect of leucotomy is in keeping with similar observations in obsessional and schizophrenics.

A wide variety of clinical pictures were found.

The course of the illness was characterized in most cases by a marked tendency to remissions.

It can be said therefore that the group as a whole showed an absence of malignant schizophrenic development. These observations bear out Stengel's contentions, which were corroborated by Müller, that the course of schizophrenia occurring in obsessionals tends to be comparatively benign in type, both with regard to the disintegration of the personality and to the tendency to remissions.

SUMMARY

1. Thirty schizophrenic patients who had obsessional symptoms at some time in their lives were investigated. They formed 3.5 per cent of the total schizophrenic in-patient population of the London postgraduate teaching hospital for psychiatry during a four-year period.
2. In twelve cases the obsessional symptoms had made their first appearance before the age of twenty, and in eleven before the age of thirty-five.
3. None of these patients had received psychiatric attention before the onset of their schizophrenic symptoms although in a considerable proportion obsessional symptoms had been present years previously.
4. In six cases, depression had been the first presenting symptom, while in eight cases obsessional symptoms had preceded any other by a considerable time.
5. In twenty-six of the thirty patients, the schizophrenic condition was of the paranoid type. There was no case of catatonic schizophrenia among this group.
6. The fate of the obsessional symptoms after the onset of the schizophrenia was studied. Transition of obsessional ideas into delusions was observed in six cases.
7. The duration, elaboration and variety of obsessional symptoms appeared to be inversely correlated with the severity of the schizophrenic illness.
8. Symptoms of depression were observed in twenty-five of the thirty schizophrenic patients.
9. There was a marked tendency to remissions in the majority of patients of this series and a conspicuous absence of malignant schizophrenic developments leading to disintegration of the personality.
10. The response to various treatments employed in this group was unimpressive.

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