THE PSYCHICAL EXPERIENCES DURING THE SHOCKS IN
SHOCK THERAPY

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In this paper, which I regard as a framework, I shall describe the
psychical experiences of patients undergoing shock treatment and
shall attempt to estimate their significance; and I shall note certain
facts to be observed in all the patients whom I examined. I shall try
to relate the psychical experiences with the organic changes and to
show that the bodily functions are reflected—like a mirror image—in
the psyche, where they leave a lasting impression in contrast to the
seemingly reversible organic events.

The paper deals with the use of insulin and triazol for the purposes
of shock therapy; and I should like to make it clear from the outset
that, according to my observations, they appear to belong to the same
group as regards the effects which they produce. It seems to me that
the distinction between them is that insulin is milder, less vehement
and perhaps less profoundly effective, whereas triazol acts like a
violent thunderstorm bursting suddenly and gives a far more vehement
shock.

INSULIN

It would probably be best to begin my report with the history of a
young schizophrenic. A young woman aged twenty (Case 1) came into
this hospital in a stuporous condition with marked features of anxiety.
She lay in bed for a long time without movements or any reactions.
I will not give the whole very interesting history of this patient in
detail, nor am I able to add the still more interesting account of the
case given by the patient herself. I am hoping to make use of this
material in a subsequent publication. She was from her childhood
onwards very much attached to her father who died when she was a
child; she did not like either her mother or her elder sister, who was

1 I should like to thank Dr. Ernest Jones for his help and kindness
since I have been in England, and to express my gratitude to the Com-
mittee of the Warwickshire and Coventry Mental Hospital and Dr. D. N.
Parfitt for the opportunity of working at Hatton Mental Hospital and for
permission to make use of the material published here.
It seemed as though I had been on the earth and in the unconscious mind, every time I awoke to be dead and not to be dead. The two parts of the treatment were different forms. If I dreamed into sleep under the treatment, I was dead, but if I dreamed on in the waking state, I was not dead. The following expression: "I am not dead" became her battle cry. She felt herself owned by the owner, who happened to be a nurse instead of the patient. After the injection she often thought it impossible to take any other medicine, but the patient was unable to sleep during the night before the injection. After the first injection of insulin, she experienced some psychic effects, but after some weeks after admission the patient began insulin treatment.

Some weeks after admission the patient began insulin treatment, which I am unable to describe in the present paper.

In the beginning of the suffering, which was for punishment, she was obedient, quiet and had a great sense of responsibility; especially in her own words: "It is quite possible that if God wants to take his legitimate child, even as a child the patient was very serious, primitive super-ego turned these hostile impulses against herself by imaginary satisfaction. Because she could not banish all the hated objects from the real world, she retreated from reality herself. The desire to do all this very tidily became imperative—everything should be in the best order before she went off—but it took her a long time, sometimes three-quarters of an hour. During the next fifteen minutes other changes too occurred; she could not move quite slowly. Her movements were in fact slower and mildly ataxic. Everything seemed to be far away and she could not judge their positions correctly. It seemed as though she were in a dream and that she could not judge the size and shape of objects. Her movements were in fact slower and mildly ataxic. Everything seemed to be far away and she could not judge their positions correctly.

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feelings of a struggle to free herself and to fight for her life occurred. She was frightened of losing this battle and of not coming round. Gradually the feeling that numbness, of imminent danger; and then feelings of a struggle to win back her life and her feelings. During the time she was coming round, things again seemed to be distorted, everything seemed enclosed and she described it thus: 1. I must thank God that I have won the battle, thank him for the victory.' She said the second part of her vision, because the characters appeared so close and distinct. On the other side, she was watching from a coma. She insisted on calling it a vision while she was watching from a coma. She was not given what she demanded.

In the first stages of treatment it is usually of only short duration; later it lasts for months, then weeks and months, and in successful cases even indefinitely. After half an hour afterwards they appear more vivid, brighter, insistent in the patient's mind. The patients are often not conscious that they have seen what they have seen, and when they are questioned about it they say they have not noticed at first that what was seen was real, and when the patient first called it a vision, she was not conscious that she had won a victory, and I am sure that that is a sign of improvement.

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Similarly in the pre-coma stage most of my patients experienced feelings of fear partly a fear arising from the profound somatic changes and partly an irrational anxiety associated with ideas of guilt; in some cases this led to a desperate wish to make atonement and obtain absolution, punishment, castration and even death. In this state the patients implore their nurses to take special care of them. One hears such remarks as: `Do you think everything will be all right to-day?' `Oh I hope I shall come round to-day!' *Holy Mary, Mother of God, forgive my sins!'

One patient Case 2 would always beg his father to forgive him and would promise never again to be disobedient if only he would not punish him. This man usually awoke from his coma beaming with happiness, with his hands clasped in prayer. He said that after the injection he always felt very guilty and dreaded that his father might punish him. After his coma he always looked radiantly happy and himself said that that was how he felt. At the beginning of his treatment he showed the typical picture of a hunger riot after his injections being noisy and excited and throwing himself about; but as treatment progressed and he had a few comas, a change could be noticed. Hallucinations vanished, he became quite sociable, and finally left hospital and resumed his former work to the entire satisfaction of his employer.

There was another patient Case 3, who described his feelings after the injection in the following words: `It is like a nightmare; it is a feeling of terrible fear; I have queer feelings like being in a storm at sea; I feel I have lost my faith in everything. I want to catch hold of something, but I cannot get a grip on anything. I just fall helplessly. It is such a relief to come round again; I feel the world is a wonderful place. My mind seems clear and happy. I was thankful that it was all over.'

I have not here attempted to describe all the patients who were treated with insulin during my period of observation, but have selected the more important features which were to be observed in nearly every one of the cases which I saw. This feeling of well-being after the coma was to a greater or lesser extent a prominent feature in them all.

TRIAZOL

The first case in this group of patients Case 4 was a woman, who was suffering from a puerperal psychosis. On admission she was excited and presented a paranoiac picture: she had imagined confronting the patient was one of those who disliked pain.

The treatment was started immediately after the injection. Between the injections she showed rapid improvement and there was no longer any symptoms of anxiety or depression, and the patient presented an entirely normal picture. This dramatic change was striking and remained constant throughout the course of treatment. The patient showed an improvement in her general state of mind, and there was a marked decrease in the severity of her delusions and hallucinations. She was no longer delusional and her affect was more normal. Her course of treatment can be described as follows:

1. The injection was given immediately after the patient was admitted to hospital.
2. The patient was kept in seclusion and was isolated from all contact with other patients or staff.
3. The patient was given a course of triazol and was kept on this medication for a period of six weeks.
4. The patient was observed closely for any signs of improvement.
5. The patient was given additional medication as necessary.
6. The patient was gradually weaned off the medication and was discharged from hospital.

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She had been completely changed by the treatment. She was now
happy and feeling perfectly happy.

After the fourth injection she was so improved that it seemed
she had passed through a storm, now that she had been through a
long series of bad moods, she had finally overcome her problems.

The first injection had been given without any pre-injection
treatment, and the second without any pre-injection treatment
either. There were two patients who had been treated without-
prophylactic treatment. The first was a woman of thirty-nine, who
had been treated four times. She was a good-natured woman, who
had always been friendly and helpful to others. She was now
completely changed by the treatment.

The next patient was a woman of twenty, who had been treated
four times. She was a very intelligent woman, who had always
been friendly and helpful to others. She was now completely
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Isidor Silbermann

I always have a dreadful feeling of dying; I am afraid I shall not

and dying. Lord - Help, Lord - I am dead, I am dead.

I felt very strange - just as if I had come back from far away. After

clear and of activity and fear a longing to do something. I

was so afraid, so afraid. I was so afraid, so afraid.

of things. I was so afraid, so afraid.

that I must die. I

and I am going to die. I

then feel myself alone and miserable in a dark place where I seemed I must die. I called out to mother because

that I must die. I called out to mother because

and the time I was so afraid.

that I was so afraid. I called out to me.

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be able to see my mother again; the only thing I can remember is shouting for her. After coming round I feel all peculiar until I go to sleep; then when I wake up again I am quite different and very happy."

This patient had twelve fits; she was changed from a neglected, unsociable, depressed and stuporous woman into a happy, useful person.

Case 9 was a girl aged twenty. She was an old-established typical case of katatonic schizophrenia. She underwent nine triazol fits. After the eighth injection it became possible to make some contact with her. She showed a little insight into her condition; gradually she became more cheerful, talked and did a little work; she admitted hearing voices but was not worried by them. The most marked feature was her hypomanic state; she was anxious to go back to her work and convinced that she could do it. Some weeks after the end of her treatment a change in her personality was noticeable again; though she continued working and talking, her manner was shy and distant. By the end of two months she had relapsed into her former condition.

Her behaviour after the fits seemed to be the most typical example of what may be expected. She would open her eyes, gaze around, look closely at her hands and fingers, put a finger in her mouth, suck it as if she liked the taste and then study the parts of her body as if she had never seen them before. She felt the different parts of her body and, sitting up, looked at herself as if she were something strange. She made sucking movements with her mouth and then began to suck the bedclothes. Her speech and hearing were disturbed; she could only mutter incoherently and could not understand what was said to her, though she appreciated the sound and the direction from which it came. After a time her speech would become clearer and she would make more sense of what was being said. Her behaviour after the fits seemed to be the most typical example of what may be expected.

In this whole group of cases there were three who showed no improvement, indeed, one of these seemed to have been made worse by the treatment. This latter was a woman of thirty-nine. Case 10, a schizophrenic who was admitted to hospital in a confused condition, was transferred to a hospital for the third time in a depressed condition where she was admitted to hospital for the third time in a depressed condition. During treatment she showed signs of restoration and recovery. A schizophrenic who was treated to hospital for the third time in a demented condition was treated to hospital for the third time in a demented condition.

DISSUSION

I shall now attempt to summarize and systematize the different stages through which the patient passes during this treatment. There are two groups of sensations: those occurring between the injections and those occurring after the injections which represent 'regression' and those occurring after the injections which represent 'restitution'.

The following stages in the process of regression can be observed in this series of patients:

1. Giddiness and ill-defined feelings of apprehension. Cases 4, 5, 6, 10, 12.
3. Blurred vision and difficulty in seeing.
4. Tinnitus and difficulty in hearing.
5. Loss of appetite and nausea.
6. Fatigue and sleeplessness.
7. Irritability and restlessness.
8. Depression and hopelessness.
9. Loss of interest in food and drink.
10. Loss of interest in sex.
11. Loss of interest in work.
12. Loss of interest in life.
13. Loss of interest in the future.
14. Loss of interest in the past.
15. Loss of interest in the present.
16. Loss of interest in everything.

These stages are followed by:

1. Improvement in appetite and digestion.
2. Improvement in sleep.
3. Improvement in energy and vigour.
4. Improvement in interest in life.
5. Improvement in interest in the past.
6. Improvement in interest in the present.
7. Improvement in interest in the future.
8. Improvement in interest in work.
9. Improvement in interest in sex.
10. Improvement in interest in food and drink.
11. Improvement in interest in music and art.
12. Improvement in interest in philosophy and religion.
13. Improvement in interest in science and technology.
15. Improvement in interest in religion and spirituality.
16. Improvement in interest in philosophy and ethics.

These stages are followed by:

1. Restoration of all lost functions.
2. Restoration of all lost capacities.
3. Restoration of all lost sensory powers.
4. Restoration of all lost motor powers.
5. Restoration of all lost intellectual powers.
6. Restoration of all lost emotional powers.
7. Restoration of all lost social powers.
8. Restoration of all lost sexual powers.
9. Restoration of all lost occupational powers.
10. Restoration of all lost constitutional powers.
11. Restoration of all lost moral powers.
12. Restoration of all lost religious powers.
13. Restoration of all lost aesthetic powers.
14. Restoration of all lost ethical powers.
15. Restoration of all lost political powers.
16. Restoration of all lost economic powers.

These stages are followed by:

1. Complete restoration of all lost functions, capacities, sensory powers, motor powers, intellectual powers, emotional powers, social powers, sexual powers, occupational powers, constitutional powers, moral powers, religious powers, aesthetic powers, ethical powers, political powers, economic powers, and all other lost powers.
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PSYCHICAL EXPERIENCES IN SHOCK THERAPY

In a psychosis not only the id but also the primitive super-ego which denies the ego contact with the outer world, gains a victory over the ego. Not only is the ego damaged but the super-ego also shows signs of impairment. The ego now builds up a world of phantasy and hallucinations; and suppressed wishes, probably from a very early period in the patient's life, enter into the phantasy world along with the other world, which changes the ego's contact with the outer world. A victory of the primitive super-ego over the ego is also the primitive super-ego.

In a psychosis the outer world, from which the libido has been withdrawn, in contrast to the excessively cathected inner world, is experienced as something strange, hostile and reproachful, with which the patient is hardly able to establish any relationship. The outer world, from which the libido has been withdrawn, is experienced as something strange, hostile and reproachful, with which the patient is hardly able to establish any relationship. The outer world, from which the libido has been withdrawn, is experienced as something strange, hostile and reproachful, with which the patient is hardly able to establish any relationship.
Powers to associate them property.

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after a time notices that he is trying to focus on different objects,
there is nothing, nothing, then he can wander round from life to life.
The ego shows a great amount of the effects of the constitution of the
process of development and the cathexis of the patient's ego. Gradually
the ego recoverts its powers and the patient is forced to take notice of
the outer world; he is experiencing the symptoms of the outer world
sensations, and the patient is forced to take notice of the outer world
the patient will be able to look in new directions and to have a
brisker attitude in his experience of vision: to begin with
awake and fully alert; after a time he is able to focus on different
development of a normal libidinal cathexis.

The patient comes back from the coma, power and consciousness
psychical experience at some level must continue and it seems
combination of the two. However, in reality, so long as the physical
influence is, and where the over-dominant superego continues to exert its

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Again, there is at first no perception of noise; after a time sounds are heard but cannot be localized, nor until much later understood. Even his own body is a new experience to the patient at this stage. He looks with interest at his strange hands, he fingers them, rubs them and licks and sucks them. He does the same thing with other objects, and when he has made a satisfactory contact with any object he repeats the process over and over again.

The power of speech is recovered from its regression in similar stages. At first the patient makes sounds, then syllables and then words, which at first he uses without regard to grammar or syntax and with a strong tendency to perseveration. He cannot understand the meaning of simple questions until they have been repeated many times; he then repeats them himself, as if trying to get hold of their meaning, and even so his first answers are usually wrong. The women had especial difficulty in recalling their married names; when asked they would at first give either their Christian or maiden names and only after some time could they give the proper answer. The patient's ability to carry out simple orders such as: `Look at my fingers!' or `Shake my hand!' or `Open your mouth!' develops slowly.

The abnormal colour sensations seem to be related to definite affective states. And in this connection it is interesting to recall Lenz's observations that lesions of the cortex in the region of the calcarine fissure may, when they heal, be associated with abnormal colour tones.

It is not possible to give any definite time-relationship between these different reactions; they varied, not only in different cases, but in the same case on different occasions. The patients' whole attitude suggests a longing for affection; a sense of loneliness—as one of them described it: `I feel smaller than a child.' In only one case was any sign of masturbation noticed.

The disturbances in appreciation of colour, shape, size and distance, which were described by the patients in both treatments as being disagreeable and strange, are especially interesting, and I should like to refer to Schilder's views. He says that positive erotic relationship is impossible without proximity, approximation and finally contact, while remoteness in space is incompatible with any close libidinal attachment.

The patients describe their feelings during the regressive period, terminating in the loss of their ego, as a fear, an actual experience, of death, and the restitution as a return to life re-created. Jeliffe goes one step further when he says: `The coma brings the individual practically into an intrauterine bath of primary narcissistic omnipotence.' After even a few shocks a change in the patients' personality can be noticed: they may become friendly and sociable, less inhibited; they may enjoy talking, or working, or playing games; sometimes they are even slightly hypomanic. Hallucinations often occur; sometimes they are even highly prominent. Hallucinations often arise; the patient may see objects or figures or voices or discover new and alien states of consciousness. He shows by his songs and speeches an increasing ability to express himself. He may now answer questions and give the proper answer. He may now reproduce the sounds which at first were useless to him. The patient is now able to express himself more clearly and more accurately than before. He may now describe his past experiences with increasing accuracy and detail. He may now describe his past relationships with increasing accuracy and detail. He may now describe his past relationships with increasing accuracy and detail.

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trauma; death is the next which breaks the law of the conservation of energy. Rebirth sets in motion once again the cycle of events which we call life and so triumphs over death.

In conclusion I should like to try to show the relationship between the bodily changes and the psyche during the shocks. During their coma the patients are restless; they twitch, groan and roll about. They have tonic or clonic spasms, they perspire and saliva freely. There are signs of vasomotor disturbances and there are changes in the composition of the blood. All these signs point to a disturbance of the hypothalamic region. As the coma deepens, all connection with the cortex is gradually suspended, until a picture is finally produced which resembles a decerebrate rigidity Sherrington.

The convulsions, rolling movements and other motor phenomena are the result of the withdrawal of control over the subcortical and mid-brain centres. In this connection I will quote Ktippers' description: `Damage to the thalamo-cerebral connections leads to a decrease in schizophrenic automatism whereby the personality is able to regain normal control over the thalamo-cortical apparatus.' Thus the psychical events have been shown to correspond to the organic changes.

A grown psychotic personality has been forced back by the shocks to its primitive level and gradually rebuilt. Just as the cortical control of a new-born child is incomplete and only gradually achieves its effect, so the new-born ego appears in its first rudiments, and slowly develops over months and years its complete contact with the outer world. In the same way as the functional blocking of the cortex produced by the coma disappears in successive steps from the more primitive to the most recently developed centres, so does the reconstruction of the ego after the shocks progress through the stages of childhood to maturity.

As was stated at the beginning of this paper, the hypoglycemic coma, from start to finish and including the epileptic fit with which it is often associated, is experienced in the same way as a triazol shock, except for the difference in the intensity of the exciting forces: the essential features in both being the intense fear and experience of death, with the subsequent experience of rebirth and the associated euphoria.

I propose to deal in this paper with one aspect of psycho-analytical treatment, namely, the value of understanding the metaphorical language used by articulate patients. Words both reveal and conceal thought and emotion. In psycho-analytical treatment our task is often that of getting through barrages of words to the sense experience and the associated thoughts. But words too can reveal the union of these and we are greatly helped if we believe this and can recognize the revealing phrase. Metaphor fuses sense experience and thought in language. The artist fuses them in a material medium or in sounds with or without words. The principle is metaphor.

Metaphor has been a subject of debate and investigation from Aristotle to our own time. One of the latest exponents expresses himself thus: `The investigation of metaphor is curiously like the investigation of any of the primary data of consciousness; it cannot be pursued very far without our being led to the borderline of sanity. Metaphor is as ultimate as speech itself, and speech as ultimate as thought.'

One explanation of metaphor has been that it reveals the divine in man and that his spiritual qualities and aspirations find expression in language that has a concrete significance. For example, `My spirit flew in feathers then' is according to this view witness to the soaring aspiration of the soul which is forced in language to the mundane expression of the same idea, which is forced in language to the mundane expression of the same idea. The investigation of metaphor is certainly the investigation of any of the primary data of consciousness; it cannot be pursued very far without our being led to the borderline of sanity. Metaphor is as ultimate as speech itself, and speech as ultimate as thought.

Psycho-analytical research however endorses the views of those who from the definition of metaphor as `a transference of a word to a sense different from its signification ' maintain that the displacement is from physical to psychical and not vice versa. `No word', says Grindon, `is metaphysical without its having first been physical.' Locke said: `We have no ideas at all, but what originally came either from sense or reason.'

C. Palisa, in Arch. für Psych., Vol. 105, p. 635.