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This article tries to explain, in the light of some neuroscientific and psychoanalytical considerations, the repetitive pattern of panic attacks. Freud considered the panic attack as an 'actual neurosis' not involving any conflictualprocess. Recent neuroscientific findings indicate that psychosomatic reactions, set off by a danger situation, depend on the primitive circuit of fear (including the amygdala) characterised by its speed, but lack accurate responses and may also be activated by harmless stimuli perceived erroneously as dangerous. The traumatic terror is stored in implicit memory and may be set off by a conditioned stimulus linked to a previous danger situation. In the panic attack, the traumatic event is created by the imagination and this construction (a micro-delusion), built in loneliness and anxiety, has the same power as the real trauma. A mutual psychosomatic short-circuit between body and psyche, in which terror reinforces the somatic reactions and the psychic construction, is established. Therefore, it is important to highlight these constructions in order to analyse and transform them. In the second part of the article the author reviews the main psychoanalytical theories about panic attacks, stressing how, in his opinion, panic attack is a consequence of the breakdown of the defence organisation at various levels and may appear during periods of life crisis. Two patients suffering from a deficit of personal identity are presented. The various organisations and the different levels (biological, neuroscientific, associative, traumatic) of the panic attack determine different kinds of therapeutic approaches (pharmacological, cognitive and psychoanalytical). While the psychopharmacological treatment is aimed at reducing the neurovegetative reaction and the cognitive method is attempting to correct the associative and perceptive processes of fear signals, psychoanalytical therapy represents both a specific means to free patients from panic attacks as well as an indispensable route for their emotional growth.

Panic seized her. Blood seemed to pour from her shoes. This is death, death, she noted in the margin of her mind; when illusion fails …

(Between the acts, Virginia Woolf).

Nowadays, panic attacks seem to have become the most widespread of disturbances, while hysteria, the most studied of illnesses in the 19th century, has practically disappeared from scientific literature.

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1 Translated by Andrea Sabbadini.

A panic attack is characterised by the sudden emergence of entirely unpredictable and unstoppable episodes of intense anxiety. Its intensity is such that it leaves behind a sense of utter exhaustion. Usually the panic attack is accompanied by strong neurovegetative manifestations, such as palpitations, tachycardia, vertigo, body tremors, diarrhoea or excessive sweating and, most importantly, a sense of suffocation. (The symptom of suffocation convinced some biologically oriented researchers that the panic attack might be due to the onset of the choking reflex, normally activated by a lack of oxygen or by an excessive amount of carbon dioxide. One of the therapies consists, therefore, in supplying

oxygen as a means of preventing the attack.) The panic attack always manifests itself psychosomatically, being a pathology that primarily affects the body.

While the specific psychoanalytical contributions to this subject are at present scant, those with a psychopharmacological or cognitive-behavioural orientation are instead numerous.

In my article I shall explore the phenomenology of this condition by trying to better understand its dynamics. I am, of course, aware of the clinical complexities underlying the panic attack, as it is a component of many and diverse forms of mental sufferings, from the most serious to the less dramatic. I shall limit myself here to consider the dynamics of the attack and to differentiate its accompanying anxiety from other forms of it. Phobia, for instance, does not present such a massive somatic and vegetative phenomenology.

The problem of whether the panic attack is a phenomenon of a psychological or neurobiological (or even neurochemical) nature also has clear implications for the modalities of a possible therapeutic intervention.

The opinion I want to express here is that the panic crisis has an entirely psychic origin which could itself unleash a specific and automatic neurobiological reaction. It is indeed possible to isolate two progressive moments during an attack: the first is when anxiety is still experienced psychologically, and the second is when there is a predominance of bodily participation and the fear becomes uncontrolled somatic anxiety.

As many authors observed (in particular in Lichtenberg's 1991 review), therapy with these patients is usually long, its outcome uncertain and often involving unpleasant impasses. I hope that my comments may be useful in understanding the quality of these patients' anxieties and to contain the symptom when it presents itself in the course of the therapeutic process.

Anatomy of the panic attack

The sequence

Those who suffer a panic attack are convinced that their death is imminent. The more acute the somatic symptoms (tachycardia, muscle contractions, abdominal colics, localised or diffuse pain, sense of suffocation, vertigo and sweating) and the psychic ones (an intense and overwhelming anxiety), the more convinced the patient becomes that death is imminent.

It is the body that, in the course of a panic attack, ‘speaks’ of its death or, better perhaps, of its agony. The psychosomatic symptoms are in the foreground and the mind registers them and translates them into unmistakable messages that a final catastrophe has become unavoidable.

Because of anxiety, respiratory and heartbeat frequency increases, sweating becomes more intense and panic spreads. It is the autofeedback mechanism of fear that brings about the characteristic escalation of the panic attack towards the real drama of death.

The neurovegetative circuits, which connect consciousness to the danger signals, seem to be so intensely stimulated in those who suffer from panic attacks that they become independent from any rational control. At one level these patients ‘know’ that they are not going to die, yet at the same time they lose all capacity to stem their fear and they truly ‘believe’ they are

dying.

Repetition

After a first occurrence, the panic attack will inevitably tend to manifest itself again. Those who have experienced a panic attack, far from feeling reassured by the fact of having survived it or from becoming convinced of the inconsistency of their terrors, seem to become increasingly inclined to succumb to it.

As a result of a vicious circle that brings about an automatic response to any anxiogenous signal, the attacks tend to reoccur and to increase in intensity, in spite of being disconfirmed each time. Once the attack has been unleashed, the patient feels dominated by an escalating sequence of events which appear to follow an unstoppable progressive course.

Preparation

The attack, even when it presents itself suddenly, has always first undergone a slow process of preparation and utilised mental associative channels that tend to be repeated in a constant way.

During a panic attack the patient 'listens' to his own body in the same way as a person traumatised by an earthquake would prick his ears at any suspicious noise, at any creaking of walls and timbers in his flat. These patients will identify any unusual signal (a heart palpitation, a muscle ache) until, in a frenzy of anxiety, their imagination will end up construing the danger that sets off a sense of fear. It is this psychic-emotive component that, if not stopped, will lead to a fall into somatic terror.

Imagination

A very important element in the preparation and onset of the attack is the role played by imagination. One of the reasons for its repetition and worsening is the conditioning that the mind establishes among stimulus, imagination and emotional response. The emotional and neurovegetative response is a product of the imagination; this lends a sense of concrete reality to the perception of the danger of imminent death. Paradoxically, having escaped the danger reinforces the next alarm.

The panic attack has a lot in common with persecutory terror. It is as if the imagined expectation of a catastrophe were so powerful as to catch the individual in a micro-delusional state: the plane is going to crash, the lift is going to stop in between floors etc. Those in the grip of a panic attack believe that what they fear will occur, or rather that it is already taking place.

Traumatic anxiety

Created in the imagination but also concretely experienced by the patient, the panic attack, once occurred, establishes itself as a traumatic event.

Just like those victims of a serious traumatisation, for example a railway accident, who are overwhelmed by anxiety whenever they see, even if only on television, a moving train,

patients with panic attacks develop anxiety whenever they approach any objects associatively connected to the panic. A common instance is that of the patient who happens to have heard about a serious illness and who, in identification with the person suffering it, develops a panic attack that repeats the traumatic event. This kind of associative imagination runs along entirely uncontrollable unconscious pathways.

'Traumatic' areas tend to become progressively wider and, therefore, to limit the patient's autonomy. (Sometimes the course of a panic attack does not follow such a negative progression. It can be limited to a very specific situation, such as fear of lifts, of tunnels, of open spaces, of driving. These symptoms can remain isolated and later become less intense or even disappear in the space of a few months. Other times, however, they can spread and cause serious damage to the personality or take on an invasive quality, with almost psychotic connotations. The panic attack can occur by day or night. In this latter case the experience of dying, fuelled by a conscious impression of disorientation, may feel even more terrifying.) A consistent characteristic of the panic attack, similar in this respect to what happens in hypochondria and in certain delusional states, is that everything that a person dreads will actually take place, if only in his imagination. The mere thought of an attack acts as a trigger; it becomes the fear that makes the occurrence of panic anxiety concretely possible.

Loss of the mental container

A specific characteristic of panic attacks is the failure in the mental function that should contain anxiety. The subjective drama experienced during a crisis is equivalent to the nameless dread that is such because the mind, unable as it is to contain fear, pours it then into the body. In so far as the mind can contain anxiety, this can be recognised and treated for what it is. One can say, 'I feel anxious or anguished for this or that reason'. When, however, the mind fails to perform this task, anxiety pours into the body and becomes deadly panic. One will then think, 'No, I am not anxious, I am dying'. In other words, what we can observe here is the same constellation that belongs to the experience of terror during real death.

In the course of a panic crisis, a backache, diarrhoea, a praecordial pain become unthinkable elements followed by the collapse of the capacity for mental containment and by the anxiety's flooding of the body. The defence mechanisms, including the

oblivion of anxiety, that would normally protect our existence, seem not to exist for such patients. They are without a 'psychic skin'. The skin tears open, the boundary between inside and outside is lost and anxiety spreads into the body. (A sense of confusion in one's bodily integrity, which is at the root of the panic attack, also manifests itself in the body's problematic relationship to space. Claustrophobia, as the anxiety of being invaded, or agoraphobia, as the fear of vanishing into open spaces and loneliness, continually threaten those individuals who have a poorly structured self and who suffer from occasional panic attacks.)

In order to emerge from a panic attack, the patient needs an interlocutor who can function as a container of anxiety: if by any chance he is on his own, it is important that a telephone is within easy reach. Fear requires a prompt reception by a calm and thoughtful listener. When the patient dreads that a panic attack may get close, he becomes just like a young child looking into his mother's face in the hope of getting information about the dangerousness or otherwise of a disturbing element that has caught his attention or threatened his body. If the

listener is detached or irritated, or trivialises the catastrophe, fear will grow to the point of becoming nameless dread. Even the slightest emotional resonance, anxiety or doubt may sound suspicious and a confirmation of the potentially somatic nature of the problem, making the patient's anxiety an even more concrete experience.

Some viewpoints on panic attacks

In order to discuss the various aetiological hypotheses and therapeutic approaches concerning panic attacks, several years ago the American Psychoanalytic Association organised a Panel on the theme of 'Agoraphobia and panic states' (Busch, 1995), in the course of which papers with neurophysiological, cognitive-behavioural and psychodynamic orientations were presented. I refer to this Panel for a review of the wide range of diverse theoretical and therapeutic approaches: biological, neuropharmacologic al, behavioural, cognitive or psychotherapeutic.

The neuropsychopharm acological approach considers panic as deriving from neurophysiological damages to the brain, sometimes of genetic origins, and recommends a neuropharmacological form of treatment. (It is well known that the fact that many patients suffering from panic reactions or from agoraphobia have responded positively to antidepressants not only encouraged the use of psychopharmacologica l medication, but also reinforced the idea that such conditions are evidence of biochemical damage to the brain.) For cognitivism, panic derives from a perceptive distortion of the fear signals and the recommended therapy is based on a combination of cognitive reconstruction and gradual exposures of the patient to the terror-inducing stimulus. The psychodynamic viewpoint is based instead on the idea that agoraphobia and panic attacks are the expression of an intrapsychic conflict and that, as such, they could only benefit from an approach that could explore the unconscious.

Currently, patients tend to be treated with psychoactive drugs or with cognitive -behaviourally oriented deconditioning therapies, while analytical therapy is rarely chosen as the recommended form of treatment.

A neuroscientific contribution

Anxiety progresses through different degrees of intensity. It reaches its peak in the course of the panic attack. Panic is different from other forms of anxiety in so far as it is activated automatically, it paralyses thinking, and it does not allow for interventions based on rational decisions. In the different case of people who are simply afraid of an expected dangerous situation, such a fear allows them to anticipate their reactions and to consider ways of avoiding that situation. We can still try to think even when we feel anxious.

Freud (1926) differentiated the anxiety associated to a real danger (automatic anxiety) from that experienced in a situation of threatened danger (signal anxiety). Signal anxiety warns us about an imminent danger situation and prepares us to deal with it. This differentiation works well under normal conditions, but in the specific case of panic attacks the ego is unable to differentiate signal anxiety from automatic anxiety and the potential danger becomes a real one. The traumatised ego becomes hypervigilant and reacts to all alarm signals as if they indicated the presence of a concrete danger. The loss of the internal container is accompanied by the loss of the capacity for symbolisation, whereby an individual undergoing a panic attack

behaves just like one who has actually been traumatised: images, sounds, certain patterns of relationship and, in particular, somatic signals can all set off a flashback reaction that is a sensation of actually reliving the traumatic event instead of merely remembering it (Garland, 1998).

Of further relevance to our discussion could be the differentiation of the terror that stems from an external danger (realistic fear) from the panic that stems from internal stimuli. The anxiety of panic attacks has some features similar to those found in traumatised individuals, but it also has its own specific characteristics, such as the fact of occurring suddenly, a tendency to repetition, a lack of recognition of the sequence of events leading to it or of what may eventually cause its remission.

While panic is a common reaction to a traumatic event at the very moment that it occurs, the panic attack produces internal terror and then projects it at a later time into an object or a situation which would in itself be entirely safe.

Joseph LeDoux (1996), a neuroscientist, has identified the unconscious pathways of fear and has proposed a classification of them depending on their relative simplicity or complexity. The simple ones are faster and less discriminating, while the complex ones are more sophisticated but also slower.

It is possible to identify three pathways or, better, three levels of the pathway of fear:

1. The primitive circuit of fear controls a whole repertory of emergency measures which allows for the enactment of immediate reactions, such as fight and flight. It is located in the depth of the brain, that is in the structure of the limbic system, which includes the thalamus, the hypothalamus, the hippocampus and the amygdala. The amygdala seems to be the main centre for the control of danger signals. This system, and in particular the amygdala which is the first to be activated, selects only the most obvious fear signals, or those incomplete stimuli that can be associated to a danger. It sets off those hormonal and neurovegetative reactions that are connected to defence.

It is the fight-flight response. Adrenalin brings about an increase in heartbeat frequency, in the blood-flow to the muscles etc. (The thalamus is the first clearing centre to the cortex that allows decoding, and later interpretation of fear signals. At the level of the encephalic trunk, the locus ceruleus secretes noradrenalin; this allows for a sensitivisation of those key points in the cerebral cortex that guarantee vivid perceptions and lasting memories. Noradrenalin speeds up cerebral reactivity and therefore an excessive cerebral secretion of it can overwhelm the brain, leading to panic and confusion, rather than vigilance and attention.)

The characteristic of the main circuit of fear is not so much the accuracy of its reaction, but the speed and the inclusiveness of its action. Only later, on the basis of information received from the cerebral cortex, can the primitive circuit of fear reconsider the initial decisions and react in ways appropriate to the danger situation.

2. The rational circuit of fear is the one going from the prefrontal cortex to the limbic system. This system is slower and more elaborate, but it allows more careful and realistic evaluation of the general situation, to make decisions and to assess the response.

3. A last circuit is the reflexive one, characterised by self-awareness, by the awareness of being afraid and of the reasons for it. When a man sees a snake, the danger message arrives from the occipital visual cortex through the thalamus. Only when the cortex has recognised the stimulus and assessed its dangerousness by comparing it with learned or innate experiences can it then send a message in its turn to the amygdala. This organ could then activate those automatic, neurovegetative or biochemical innervations that produce the fear reactions necessary for survival (increase of heartbeat, of breathing frequency, of vigilance etc.). However, the pathway thalamus-cortex-amygdala, even if it is more discriminating and accurate in spotting the real danger, is too long to guarantee survival always. There is then a shortcut directly to the amygdala which allows immediate reaction to danger, in only a few milliseconds.

Let us take as an example the situation of a man walking by night through a wood. Any noise could evoke in him an alarm reaction triggering those neurovegetative signals which are related to fear. Only later can he understand that the alarm was unjustified, that the noise was just an innocuous rustling of leaves. In this case the alarm signal was activated through the shortest pathway, the one leading back to the amygdala. This second pathway, immune from conscious control, can be problematic because danger recognition in some cases may be false; discrimination only takes place a posteriori, after the neurovegetative circuit of fear has already been set off. In other words, there can be a false alarm which is recognised as such only after the stimulus has been scrutinised by consciousness. It is interesting to notice that the initial acknowledgement of the anxiety-provoking object takes place in the first instance along entirely unconscious pathways that avoid any rational control. (In their studies on phobic subjects Öhman et al. (1995, 1999) demonstrated that stimuli that are not perceived at a conscious level, for instance through the subliminal presentation of photographic sequences of feared objects, can still provoke alarm reactions (increase of skin's electrical conductivity) even when they are not consciously perceived. It may be noted that even under normal conditions the perception of dangerous objects,

such as snakes or spiders, is faster than the perception of more neutral stimuli, such as flowers or mushrooms. Phobic individuals, furthermore, display even shorter reaction times than normal subjects do. This means that phobic sensitivisation can intensify the unconscious attention to danger and trigger the fear reaction in a much quicker and indiscriminate way than what happens under normal conditions.)

From what I have discussed so far, it may be possible to suggest that the anxiety of panic attacks gets stuck inside the primitive (limbic-amygdalic) fear circuit. This would explain why it manifests itself so suddenly and why it fails to discriminate real dangers from imaginary ones. For those in a state of panic attack, the imaginary danger is equivalent to the real one even if, to the eyes of an external observer, the former does not exist at all.

Where are emotions formed?

An important point in support of my argument is that the fear system can be activated by a stimulus that may not necessarily coincide with the real experience of danger. Indeed, the primitive diencephalic circuit is incapable of discrimination, but can set off the psychosomatic reactions that follow neurovegetative and hormonal pathways also in the presence of non-specific stimuli. (The patient suffering from panic attacks functions like a flat with an alarm system which, being defective, can be set off at the slightest stimulation. In this case, too, a

system created to provide protection turns into the very cause of a disturbance.)

The fact that the panic reaction could be dissociated from any real danger and be the result of an imaginary construction helps us understand the dissociation between real danger and imaginary fear that is at the foundation of phobias and panic attacks. The amygdala could perceive as danger signals what are nothing more than imaginary constructions.

The fear circuit can also be activated by alarm perceptions coming from the body. For instance, a slight tachycardia is registered as a sign of a heart condition and transformed into an active cardiac attack. It is the signal coming from our own body to produce the attack and to later become the target of the fear signals which are sent back again to the body, thus creating an unstoppable vicious circle.

It may be useful to remember, at this point, the 'somatic theory of emotions' formulated by James in 1884 (Galati, 2002). James believes, as is well known, that emotions originate in bodily sensations and not the other way round. We normally think that if we come across a bear we get frightened and for this reason we start shaking with fear. James, however, believes the opposite is true: first we shake and then we feel frightened. At the sight of the bear, the bodily tremor is triggered off and this, in turn, induces fear in us. If emotions, James claims, were not first experienced and acted in the body, or through the body, they would only have a cognitive quality and would be colourless and without emotional connotations. However, James's theory was proved to be inaccurate because bodily reactions themselves (such as, for instance, pallor or tremor due to an excessive presence of insulin) cannot bring about emotional reactions. As Cannon (1927) demonstrated, emotional reactions are first registered in the brain and only later trigger bodily manifestations.

I believe, however, that James's hypotheses, while clearly inadequate to explain what happens in normal functioning, could be useful in understanding what happens instead under conditions of failed danger discrimination and of an excessive pull towards anxiety. Once the panic crisis spiral has been set in motion, the perception of body alterations (extrasystoles, tremors, sweating) which are controlled by the amygdala indicates to the mind the deadly danger and produces the feeling of terror. For instance, many panic attacks are set off by neurovegetative perceptions stemming from abdominal pains, headaches or simple muscle aches. The distorted visceral and body signals which are thus registered in the amygdala bring about the emotion of fear and increase the bodily reaction that triggers the psychosomatic vicious circle.

Cannon's considerations about those emotions that are registered in the brain before causing somatic alterations are only valid under normal conditions, but not when the emotions (fear, in our case) are caused by our imagination, pushed into the body and then registered by the brain in this paradoxical way. In the panic attack it is the body that provides the mind with the sensations of fear, while the mind is entirely focused on the body, and its normal capacity to discriminate and understand the nature and origin of emotional states is dimmed. Under these conditions the mind no longer has any power over the soma, and the psychosomatic reaction, once set off, follows its course beyond any possible conscious control.

The primum movens of this catastrophic circuit is based on the individual patient's own predisposition to suffer anxiety, on his fantasies about the inside of his body and on his constant perception of his internal organs' functioning as being laden with dangers. It is often

possible to guess that the patient's ongoing apprehension can be directly linked to the introjection of a mother who was unable to deal with her child's somatic disturbances without feeling anxious herself.

Traumatic memory

Let us take as an example a simple phobia that could provoke a panic attack. A person who is terrified of getting into a lift has often imagined being in a lift when it stops or falls (similar to panic induced by flying).

A normal person knows that plane accidents can happen or that some lifts can occasionally get stuck; but he believes that his plane or that lift will quickly take him where he intends to go. Positive thinking will prevail. The phobic individual, on the other hand, has created a catastrophic scenario that is most likely to become real. Often imagined, such a scenario has impressed itself in his memory, thus becoming a traumatic memory capable of producing a sense of terror. In this case, his emotional reaction is not different from that of an individual who has been recently traumatised or has been in real danger and rightly fears that it could happen again.

Once a trauma has occurred, it is accompanied by memory disturbances and produces both hypermnesia and amnesia at the same time. LeDoux (1996) stated that unconscious memories of fear, established through the amygdala, seem to be branded forever on the brain. (The reason for this traumatic fixation seems to depend on the fact that the excessive stimulation of the amygdala interferes with the functioning of the hippocampus; this, by sending stimuli to the prefrontal cortex, facilitates the conscious

appraisal and the symbolic representation of the experience. Traumatic memories are therefore indelibly inscribed in the amygdalean memory where they remain as actual somatic or visual sensations. Successive passages through the prefrontal cortex, however, can contribute to an alteration of the concrete characteristics of the traumatic memories and bring about a transformation of the traumatic memory's meaning and emotional valence (van der Kolk, 1994). It has also been demonstrated that, under normal conditions, insignificant stimuli do not excite the amygdalean cells because of the inhibiting activity of GAB A (γ-aminobutyric acid). When this GAB A protection fails, for instance, because the amygdala is overstimulated, non-dangerous stimuli receive the same arousal responses as the dangerous ones (LeDoux, 2002).) LeDoux differentiates emotive memory from the declarative memory of an emotional situation. The declarative memory of an emotional situation concerns the recollection of consciously retrievable elements. The emotive memory, on the other hand, concerns the conditioned emotional response that was formed in the course of that particular event. An emotional response can be conditioned by a single event, as is the case with victims of traumatic violence. If a policeman is injured in the course of a shooting incident, his declarative memory can provide all details needed to frame that event. His emotive memory, though, will not be activated by the narrative, but by a sudden and intense fear of an associative kind (for instance, if the subject happens to hear the noise of gunfire). If the emotive memory is accompanied by the declarative memory of the original event, then the person can ‘know’ why he is afraid; otherwise he will be unaware of his sense of terror.

The relationship between production of the traumatic event, anxiety and memory is of crucial importance for the creation of a panic attack. Research on the nature of traumatic memory

indicates that trauma inhibits the declarative memory (the one capable of bringing memories to consciousness), while it does not inhibit the implicit or non-declarative memory, that is the system of memorisation which controls conditioned responses and such behaviours as sensory-motor responses, which were learned but remain unconscious. We are now in possession of sufficient information to understand the neurobiological processes involved in post-traumatic memory disturbances (van der Kolk, 1994) and this allows us to understand better the dynamics of a panic attack.

Phobia, that established itself as a traumatic memory, is indeed treated as any real trauma. Just like the delusional patient who may be convinced that he is persecuted and approaching death, the individual undergoing a panic attack is also convinced that he is at the point of death and, for this reason, is in a state of terror. The fear of dying and the threat to the bodily self are indeed at the basis of both panic attack and persecutory delusional anxieties. The associative constellation, once formed, tends to reoccur and to become more powerful, just as is the case with post traumatised patients who react anxiously to any stimuli associated to the traumatic scene.

Timothy Davis offered a most useful contribution to these issues. He states,

After decades of research ... learning theorists have demonstrated that classical conditioning is a 'high level' process, capable of representing complex temporal, spatial and logical relations between events, features of those events and the contexts in which the events occur (2001, p. 452).

These complex representations form the primary basis for our expectations on the nature of future events. Such expectations are non-declarative and, therefore, the conditioning processes are more numerous and diverse than the passive processes. For those who have undergone a panic attack, it feels almost like an inexplicable and unthinkable traumatic event that reoccurs every time those same associative constellations which can trigger it present themselves.

Because the terror that the attack may reoccur is most intense, the patient must move away from any phobic place or even from any mental association that could set off an attack. He tries not to think about it and to dissociate it from his memory. The dynamic of post-traumatic memory explains the stubborness of certain psychopathological configurations based on anxiety and helps us understand why these are so hard to be worked through in analysis. If a person experienced a delusion of persecution in which he felt his life was in danger, once he emerges from the delusion he still carries with him the delusional traumatic anxiety; any associative element (a memory, a word or an object) that may be connected, even from afar, to the psychotic episode could make the delusional anxiety re-emerge (De Masi, 2003).

Similar considerations apply to the panic episode which, as I claimed above, is like a repetitive micro-delusion exposing the patient to aconcrete experience of dying, suddenly facing him with a 'nameless dread' and provoking in him that fear of annihilation, biological as well as psychological, that has the power of destructuring the mind and damaging any sense of existential continuity and integrity.2 For such a destabilising effect to occur, the trauma must be experienced in conditions of total loneliness and impotence. Through mechanisms that under stressful conditions would increase the power of memory, there occurs a fixation of the traumatic experience (which, in the case of the panic attack, has only taken place in the subject's imagination), a traumatic memory that will not follow the modalities

normally regulating the transformation of memories. It is a conditioned memory doomed in principle to remain permanent.

I will end my reflections on what we can understand from the data emerging from the neurosciences here. We shall now consider the dynamic of panic attacks from the perspective of some theoretical models on the origins of anxiety and through a brief review of the psychoanalytical literature, leading us then to two brief clinical examples.

The psychoanalytical context

It is not easy to summarise the psychoanalytical views about panic attacks. Back in 1895 Freud had already intuited that panic had a special status and had published an article entitled 'On the grounds for detaching a particular syndrome from neurasthenia

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2 I recently (2002) suggested that the idea of one's own death, in whichever form it may present itself, will cause in human beings an unbearable anxiety and take on the status of a traumatic event par excellence. The remarkable absence of symbolic meanings and the concreteness of thought when faced with the reality of death bear witness to the presence of an impotent area in our minds, a real absence of thinking. For this reason the emotional impact of dangers threatening the survival of the self cannot but interfere with the capacity to remember, convey and conceptualise the traumatic experience through words or symbols.

under the description of anxiety neurosis'. Freud describes two different kinds of anxiety: the first originates from a repressed thought; the second is characterised by a sense of panic accompanied by gross neurovegetative symptomatology.

Freud (1893-95, 1894a, 1894b) suggests that there is a type of anxiety which is not psychological (that is, which does not derive from emotional or relational causes). He differentiates 'psychoneuroses', where anxiety is associated to a conflictual unconscious content converted into a somatic symptom, from 'actual neuroses' (phobia and panic), where there is neither repression nor actions intended to transform anxiety. These latter forms of neurosis then, according to Freud, do not derive from psychological factors (complexes or conflicts) but are connected to simple physiopathological problems, for instance to an accumulation of sexual desire that cannot be discharged according to the well-known hydraulic model of the libido. In this way Freud understands the automatic and conditioned character of panic anxiety.

For what concerns their genesis, Freud maintains that panic attacks occur in those who abstain from normal sexual relationships. Having then linked anxiety to sexual desire, Freud makes a further differentiation between psychic tension and psychic desire in order to explain why anxiety also manifests itself in those individuals who seem to have no interest in sexual relations. He states that there can be psychic tension without it reaching a representation of a sexual kind and, therefore, without conscious desire. In any case, there can be sexual tension, though not experienced as sexual desire, which, having reached a certain degree of intensity, will then determine the triggering of anxiety. I have recalled here this first Freudian model because I believe it contains a useful intuition: the panic attack is not the outcome of a process of repression of emotional conflicts, but, rather, it is supported by primitive, automatic and

pre-verbal mechanisms. The panic attack, therefore, would be non-conflictual.

Although a number of authors (Shear et al., 1993) have considered this early Freudian intuition to be pre-psychoanalytical on the grounds that it was formulated before the discovery of the dynamics of the unconscious, of the Oedipus complex and of infantile sexuality itself, I believe that Freud had in this case recognised an important characteristic of the panic attack, that is its immediacy and linearity which place it outside of conflictual dynamics.

It is also true that Freud later changed his viewpoint on anxiety, giving increasingly more relevance to unconscious conflicts. For instance, in the case of Little Hans (1909), the horse phobia is understood in terms of oedipal conflict and related to castration anxiety. In addition, in the case of the Wolf Man (1918), the castration anxiety following his homosexual desire for his father is seen to be at the origins of his phobia of wolves. However, if we look at it more carefully, we shall see that, while Freud emphasises the importance of the aggressive and erotic conflict only in the case of phobias, his successors attribute the same dynamic also to panic crises.

In the analytical literature, and up to the time when the psychosexual model had prevailed, it was accepted that panic attacks too, like phobias, derived from instinctual conflicts. As an example of the many psychoanalytical contributions from the past, I shall mention an article by Greenson (1959) who, following a psychosexual model, associates the symptoms of the panic crisis to aggressive or sexual infantile conflicts.

Even before a crisis, the patient finds himself in a state of tension; the panic attack is then triggered when a specific event intensifies the neurotic conflict.

Post-Kleinian literature, on the other hand, emphasises the connection between panic attacks and primitive anxieties. For instance, a psychoanalytical 'Note' by Segal (1954) deals specifically with phobias and panic attacks. In that article, the author considers a female patient who seems to be a case of serious phobic symptomatology within a borderline organisation. Segal starts from the assumption that this patient is fixated in a very basic way at the paranoid-schizoid position. Her work is based on the application of Melanie Klein's (1946) concept of projective identification, according to which psychotic patients would project the undesirable parts of themselves outside, thus making the objects of such projections a source of persecution. For Segal, crises of depersonalisation, hypochondria, extensive food and crowd phobias in her patient would all be the manifestation of anxieties related to the paranoid-schizoid position. During panic attacks the ego, experiencing any frustration as a death threat, would feel persecuted both from the outside and the inside by disintegrated objects. Segal believes that regression to the paranoid-schizoid position takes place when the patient gets in touch with her ambivalent feelings. In this primitive stage, any frustration is experienced as an actual death threat, as disintegration of the ego, as getting lost, as sinking into nothingness or being surrounded by a whole set of dangerous objects.

According to others, the symptom 'panic' can be the expression of the transformation taking place in the analytical process. Silberer (1989) describes a patient who develops panic attacks at the very moment when the analytical transference comes to the fore. These attacks bring to the surface significant and traumatic events from the past, making it thus possible to work them through.

For Ferro (1996), who refers to Bion's model, panic attacks occur when a patient experiences primitive emotions such as hatred, jealousy or rage for the first time. These vital feelings are experienced as catastrophic in so far as the mental apparatus that could contain and think them is absent.

The problem of panic attacks is directly connected to the wider issue of anxiety, its origins, its meaning and its modulation.

A better psychoanalytical understanding of the genesis of anxiety can undoubtedly be found in changes to theoretical paradigms, in the shift from an instinctual to a relational model. The 'constitutional' predisposition to anxiety tends, nowadays, to be understood in terms of missing, distorted or failed relations, rather than in terms of instinctual characteristics. This point of view is closely connected to Freud's (1920) concept of a protective barrier, he suggested that the mind is contained within a sort of skin that would protect it from excessive stimulations, but it could also get pierced and torn. For infants and young children, the function of protective barrier or filter is carried out by mother in so far as she has a natural capacity to evaluate what her child can tolerate at any given moment.

For instance, Winnicott (1958) (dual unity mother-baby) maintains that the threat to go to pieces or the fear of persecution derive from a missed response on the part of the object supposed to receive and heal the child's anxiety. For Bion (1962) too, death anxiety represents a primitive and natural form of communication that

is projected into the mother so that she can receive it and later return it in a more bearable form. If mother fails in this work of transformation, the anxiety becomes nameless dread. According to this new perspective, the overcoming of primitive death anxieties depends on a mother's capacity to understand them and to return them to her child, rather than on the power of infantile instincts. Bordi (2002), emphasising the theoretical contribution of attachment theory, states that a mother's capacity to mentally 'contain' the affective states experienced as intolerable by her child manifests itself, according to that model, in terms of physical care; as a result, the emotional stress is modulated in such a way that the child can form a representation of it as a condition for working it through. 'Attachment theory', writes Bordi:

has reached similar conclusions to Bion's on this point and has also added a substantial empirical content to it. On the basis of these contributions, we could consider that anxiety takes on a catastrophic meaning for those individuals who, as infants, had not enjoyed adequate maternal mirroring; as a result, they are not equipped with a symbolic barrier capable of containing states of physiological imbalance. Their insufficient affective regulation strategy, then, seems to be related to the inadequate internal presence of a maternal mind that could be aware of the child's physical state of stress and could disjoin it by representing it as tolerable, thus making it possible to mentalise it (2002, p. 13).

Khan (1963), with reference to his concept of 'cumulative trauma', describes the effects of prolonged psychic damage to a child, in the context of his dependence, when mother systematically fails in her functions as protective shield and auxiliary ego. In this respect, such a mother does not allow for an adequate strategy of anxiety regulation and mentalisation and becomes herself a source of anxiety. It follows from this that we can make further progress in our understanding of panic states if we reflect on the outcome of the interactions with a pathological parent in the earliest stages of psychological development, when the child

is not yet capable of representing or giving meaning to the traumatic event: this is then incorporated in the unconscious organisations and linked to those automatic procedural responses that are inadequate to modulate anxiety.

It will be clear from all this that analysts should bring to their clinical work a kind of relational context that could allow for an emotional response to the patient's original anxieties about not feeling adequately contained. However, despite the vast amount of knowledge and the numerous etiopathological hypotheses currently available to us, the management of panic crises in our clinical practice is still always difficult. In the course of analytical treatment, what can happen is that the symptom becomes extenuated or even disappears as the patient makes positive progress. In this case, it is as if at a certain point the patient naturally reached a protected area thanks to which the attacks stop, without either analyst or patient understanding why they do. This change mostly depends on the overcoming of that state of continuous emergency that predisposes to panic attacks. (A patient of mine, probably the most serious case with this symptomatology that I have ever had in analysis, welcomed the onset of depressive states with a sense of relief, however painful these were, because at least they brought her some temporary relief from the panic attacks. Sometimes this patient's panic attacks were so intense that she felt an urge to jump from the window, to look for death in order to put an end to her terrible state of

anxiety.) It is also likely that this change depends on a transformational process that has taken place progressively, that has re-established an adequate level of emotional vitality and that has allowed the patient to emerge from a retreat where the body was constantly in a state of high alert.

The panic attack, therefore, could be considered as the symptom of a complex, yet non-specific, suffering of the self, as the expression of the failure of certain parameters necessary to its functioning. In the panic attack, furthermore, we could find a repetition, in acute form, of that original incapacity (probably the mother's) to differentiate mental from physical states, to 'disjoin them' and to represent them as bearable.

The anxious sensation of not understanding oneself causes an accumulation of anxiety; this anxiety, in the course of the crisis, pours into the body and finds expression in a sort of visceral language, making it increasingly difficult to find psychic representation. Psychoanalysts, however, know that phobias and panic attacks are just symptoms of a much more complex picture: they are the expression of a defective personality.

Often panic attacks occur during an identity crisis, at times of change (growing into adulthood, mid-life crisis) or as psychosomatic reactions to separation; anyway, they always indicate a failure in the structuring function of the self.

From a clinical point of view, analytical patients with phobic disturbances or panic attacks require two therapeutic conditions. The first condition is to help them control and understand the anxieties that devastate them. The second condition is to help them build a stable and permanent sense of self. This means helping analysands to develop their own individuality with the capacity to formulate autonomous opinions and thoughts in order to attain emotional experiences that can be free from inhibitions, self-indulgences or unconditional conformity.

From a psychoanalytical point of view we could claim that panic attacks are provoked by a

fragile self's defencelessness, which opens the floodgates to overwhelming anxiety. Indeed, clinical experience teaches us that the symptom of panic is always accompanied by an identity defect and betrays a failure of the self.

How do we link the data drawn from neuroscientific studies to the psychoanalytical hypothesis of the panic attack as a symptom of a poorly structured self? How can we explain that panic attacks betray deficiencies in the personality and are always accompanied by problems of personal identity? Which are the defences whose collapse can cause a panic attack? To answer these questions we have to refer briefly to the defensive organisations in the establishment of the self and to their precariousness when the identification in fantasy with an idealised object replaces a self-knowledge grounded in emotional experience.

I shall now report some clinical material about two analytical cases in order to offer a brief illustration of how panic attacks can manifest themselves in a variety of psychopathological contexts (the first clinical example being about a deficiency in the self with narcissistic defences; the second case concerning a traumatised borderline patient); how panic attacks can indicate the drop of defences; and finally how they can be present in certain stages of the analytical process.

Panic and narcissistic defences

The patient, aged 25, started a four-sessions-a-week analysis because of a symptomatology characterised by repeated panic attacks and hypochondriacal experiences that sent her frequently to consult doctors or to the hospital's emergency ward.

As a child and as an adolescent she was clever and brave. During childhood, her attitude made her never give up in situations that a normal child would have found very difficult: she would go to the doctor without showing any fear and could successfully defy physical pain. On the threshold of maturity, however, this defensive outer appearance gives way; she now becomes fearful of everything and her imagination creates an unending series of dangers, illnesses and tumours.

In the first dream she brings to analysis, the patient sees herself showing a town's monuments to a group of people; her function is to be a tourist guide. In the dream the patient is aware that she does not know that city at all and that she does not know a thing about the monuments she is describing. It is obvious that she is showing her analyst how her false self has always been present during her development, misleading herself and others to believe she knew everything while perhaps being entirely unprepared to face her own life. It seems to me that this dream is particularly useful to illustrate an aspect that is very frequent in this kind of patient; that is, the pervasive fantasy of living in someone else's mind (in the case of this patient's dream, in the ‘group of tourists’). The patient's crisis, with the symptomatological presence of panic attacks, came about after her father's death and the fading of a romantic relationship with a young man of her own age. In fact, the stated strength that had guided her through childhood and adolescence derived from a very idealised relationship with her father, an important politician who had set himself up as an example to his daughter who, in turn, could only be strong and perfect herself.

An important characteristic in this patient, common to many other individuals with panic attacks, is her need to live in someone else's mind, to exist only in so far as she is ideally seen

by others. Indeed, this patient has grown up to be ‘brave’ because she was dominated by a ‘voice’ that made her feel ‘special’ if she dealt successfully with dangers and all difficult things. The ‘courage’, which in this case she had been acknowledged as having, did not stem from real emotional competence, but from her need to silence that same ‘voice’ that could accuse her of being a coward and weak unless she faced dangers. The more difficult, frightening or painful something is, the more she has to overcome her fear in order to then feel she is like a heroine.

It must be added here that, notwithstanding her privileged relationship with her father, there was a lack of a maternal figure, which had left the little girl to face all the anxieties related to the mysterious functioning of the body and of the external world on her own. From my reconstructions, her relationship with her mother, an energetic but also violent and depressed woman, had been a very tormented one.

The patient, driven by the will to continuously perform, also for the purpose of reassuring her parents, develops a muscular ‘second skin’ (Bick, 1968), instead of real qualities. She is the little girl, pushed out from both of her parents' minds, who believes she has to face everything on her own. To simplify, these patients have been

unable to use that maternal function that Meltzer (1967) calls ‘toilet-breast’ and that allows one to have a mental space in which to pour one's anxiety. This primitive form of evacuation precedes the next stage that allows the child, through the active and modulated response of the maternal container, gradually to introject the sense of having to do everything by himself, which inevitably raises anxiety to an intolerable level. In the case I am reporting here, the patient's identity is intimately connected to a delusional system that has suddenly collapsed, leaving her in a terrifying hole. This collapse has opened the doors to panic suffering, but has also left the field open to potential experiences of real emotional growth.

Let us go back now to the genetic hypotheses about the anxiety that concerns the maternal failure to contain, such as they were formulated by Winnicott, Bion and the attachment theorists (see above). We must add here that, if a mother has not been able to take her child's fear inside herself, the child will build that muscular second skin which, once shed, will let the whole catastrophic anxiety re-emerge to the surface. A certain defensive structure (the ‘second skin’) has allowed this patient to survive and move on in her life up to a certain point, while the infantile trauma (in this case, a difficult relation throughout childhood to a depressed mother) did not cause excessive damage.

This analysis ended positively. The patient came out of her panic crises after about one year of therapy when she realised that it was necessary for her to acquire a true identity. Crucial in this process was the move from an initial idealised transference that repeated her relationship with her father to a different kind of transference, much more painful and difficult to tolerate, whereby emotional dependence involved a sense of desperate loneliness. It became clear that the ideal bond the patient had developed with her father had had the function of allowing her to avoid the inadequate relationship with her mother, which then dramatically represented itself in the transference during analytical separations.

For a long time, there was an ongoing oscillation between the ideal relationship and the subsequent collapse into loneliness and despair. The overcoming of this oscillation was possible as a result of the progressive understanding of her past and through the introjection of

a new object, capable of sharing her emotions and supporting her. In this phase, what was of fundamental importance was the analysis of everything that could have been delusional, seductive or real in our relationship. In the course of the analysis her emotional experience became associated to her real self that gradually found its structure through the introjection of real experiences and relations.

In less complex cases, the panic attack signals the collapse of narcissistic organisations. For this reason, panic attacks are particularly common in mid-life crises (when the myth of one's own efficiency, beauty or success can no longer contain the anxieties concerning the limitations of one's existence) or in those reactions to being abandoned where separation from one's partner is experienced as a collapse of the self and of one's sense of security.

From my point of view, the elements of excitability and fantasy that create a pleasantly illusory world are the same as those which can cause catastrophic failures and a collapse into the void. Indeed, I am convinced that the fantasy structure that

leads to traumatic terror after the defences have collapsed is in a continuum with the fantasy structure that construes the idealised self.

Panic and trauma

Trauma prevents psychological growth and can grossly interfere with psychic development; this is particularly the case when the parents' violent projections cause a disturbance to the infantile self and an invasion of the child's emotional space very early in life and in a massive way. In these cases, the presence of strenuous self-destructive components allows for a most precarious balance between anxiety and a defensive delusional world by generating an emotional void and a lack of personal meaning from which it will be difficult to recover. The analyses of these cases are the most complex and often have an uncertain outcome: the inconsistence of positive experiences can only reproduce panic anxieties repeatedly and over time, while emotional growth takes place among continuous difficulties and ups and downs.

I will now present a more severe case, concerning the ongoing analysis of a traumatised borderline patient (we are at the end of the second year, with a frequency of four weekly sessions). At the beginning of her analysis her more serious symptoms included a pervasive anxiety, severe insomnia, anorexic behaviours and a total emotional dependence on family figures.

The trauma for this patient started in the first months of her life, when she systematically threw up milk and solid foods due to a pyloric disturbance that had remained undetected by her family. It turned out that her mother had suffered from depression when the patient, the second of three children, was born. From early childhood she went through anorexic episodes and showed a tendency to cause damage to her own body. For instance, as a young child, she continuously injured her legs to such an extent that she convinced a doctor to diagnose a skin disease; the thought of having thus deceived her parents, who would now have to look after her, made her feel secretly triumphant.

Her difficult relationship with her mother resulted in her early departure from home during adolescence, and in her ending up in a series of different institutions where she received a variety of treatments from several therapists. For the sake of brevity, I shall skip her history

and the complex clinical symptomatology which developed through the years, and will only say here that when she enters analysis she is 35 years old, married with three young children and works as a teacher. Alongside some positive results—such as a good profession, marriage and being a mother—all achieved in the context of ongoing instability, the patient brings with her an internal world devastated by anxiety and depression that she tries to keep under control through a massive use of psychotropic drugs.

I shall report here a few sequences from the first phase of her analysis, a period during which her anxiety could not yet be contained.

In one of the first dreams this patient brings to analysis, what emerges is a passive and anxious acceptance of death, projected on to the figure of the analyst: 'I dreamed of you, my analyst, squatting in the corner of a room. You were telling me about someone

who had not come back from the queue …' The 'queue' is that of those people going to the gas chamber in Nazi extermination camps, whose world has become familiar to the patient through her continuous readings, collection of photographs, paintings and repeated visits to those camps.

In another dream, a girl is incarcerated in a sort of very narrow iron cage, hanging from a wall outside a balcony. Her parents have to decide whether she should live or die. I interpret to the patient her uncertainty as to whether she should live or die, whether she should or should not kill herself, which she experienced as being incarcerated inside her resentment against her parents.

Vanishing into nothingness is a possible solution to the pain of being in the world when this is experienced as a continuous source of terrible sufferings. We discover that her panic crises, that devastate her desolate horizon, come about when she empties her mind: then things and people appear to be so foreign and altogether devoid of any significance. In the patient's words, '… it is the paralysis of a heart that doesn't feel anything any more because, emotionally, it doesn't recognise anything'. It is at that very moment that she experiences the most acute anxiety of the panic attack.

During the first months of her analysis I am in search of a context of communication that may allow me to understand and modulate the patient's intense and most unstable anxiety (which also intrudes in her life during the night: every time she tries to go to sleep she is soon woken up again by terrifying nightmares with a traumatic content).

I am left with the impression that only an extremely receptive analytical listening could facilitate the establishment of a first containing function. This process is immediately cut short by the disruption caused by the first summer break. After a dramatic telephone call, following repeated panic crises during the summer, the patient eventually starts again with her analysis (in her mind, my inevitably brief response over the telephone makes me similar to her mother: emotionally distant and lacking in understanding). A few weeks after coming back, she announces she has become pregnant. Conceiving a child seems to be her ultimate expedient to support herself (to be herself inside the embryo in her own womb). She will say that she wanted her pregnancy not only to get confirmation of her fertility (she had previously had an abortion), but also because a baby in its very first months of life represented for her an

interlocutor, a silent receptacle for her relentless death anxieties.

In the second month, a new miscarriage becomes a real threat. After this trauma, to defend herself from the panic of a feared loss of her baby, the patient decides to behave as if the pregnancy were not real, but only a figment of her own imagination. The mere thought of being really pregnant would set off an unbearable sense of panic in her. Even if her bodily changes make her pregnancy openly visible, she denies it to everybody, including her children, until their teachers call her to school to convince her to tell them the truth. From that moment on, the pregnancy becomes a reality: even the ultrasound scan shows that there is a real, live baby in her womb, and not just an air bubble.

At this point panic attacks have her in their grip again; they make her rush continuously to the casualty department, or they make her plan, against all medical advice, to have countless more ultrasound scans. She demands to be given test after test in order to be reassured that the baby is still alive, that it continues to grow, that its head's circumference has increased, or to compare different scans with one another. It is obvious that this patient's anxieties are related not just to the baby, who should be born but could also decide to die, but also to her own infantile self, torn by doubts as to whether she should survive or let herself be aborted. This anxious dilemma develops without any conscious awareness on her part. As soon as she wakes up, in a state of agitation, after a night full of nightmares, she feels an anxiety quietly growing in her, out of nothing and without clear representation. Then, suddenly, a delusional thought that requires firm denial escalates inexorably inside her: the baby is in danger, or is already dead. However, throughout her pregnancy, neither reality testing nor analytical interpretations will stand up to the power of her catastrophic imagination.

After delivery by Caesarean section, which frees her from the baby and from the catastrophic ideation centred on the fear of an abortion, only a few months go by before the patient begins to wish to be pregnant again. The defensive, idealising and exhilarating significance of being pregnant is this time clearly evident. She dreams that she is a worker in a factory. Her job is to put children who look like puppets inside wooden boxes and then close them. We are approaching Christmas and she associates the wooden boxes with the seasonal presents of cases of wine and champagne, which apparently her husband enjoys drinking in some considerable amount. The patient, without remembering the panic states that had had such devastating effects on her at all, announces that she is still planning new pregnancies. These, as it would appear from the dream, have the purpose of creating in her a state of alcoholic excitement as a defence from a state of lack of vitality (the child is lifeless and looks like a puppet).

I would like to point out that, for the first time in her analysis, this dream is an attempt to communicate: it visually represents how the patient, as more analytical holidays approach, tries to defend herself from panic anxiety by creating a euphoric state in order to deny the unbearable pain of feeling abandoned. The dream's intrapsychic communication and the work we did together on it in the course of our sessions stop her from acting it out this time. The patient, however, still seems to be in a precarious position: an internal ‘membrane’ that could protect her from anxiety has not yet been formed.

She dreams that at two o'clock at night, when she is not asleep, the analyst welcomes in another patient, called Ada, who is about the same age as herself. She feels angry, jealous and powerless. When I suggest that Ada seems like a favourite sister, the patient replies that Ada

has a terrible relationship with her daughter and resembles, in many respects, her sister who, in her opinion, is still her mother's favourite.

The ‘hole’ from which the attacks of panic anxiety originate is constituted by a persistent internal traumatic condition. In this dream, analysis itself is confused with a traumatic condition and the analyst is not yet perceived as differentiated from

the traumatic object. A first protected space in her mind, an internalised place for emotional containment, emerges in one of her last dreams. She finds herself in a room that has been prepared for her, where she can stay, work and study. She sees a wooden desk, just the kind she likes. She associates this room with the presence of a headmistress who, as the patient remembers, had shown her that she valued the patient and was fond of her when she had to leave the school where she used to teach. There is, in this dream, a sense of well being at the realisation that someone has prepared that room just for her, thinking about her. But this peaceful sensation, to be thought of and kept inside the mind of a female figure, suddenly ends and the room disappears, as she sees her sister, and then mother replacing her.

Conclusions

In this article I have attempted to consider, in the light of certain elements taken from the neurosciences and from analytical clinical experience, the ways in which ‘panic crises’ can develop.

The hypothesis I formulated, while taking into account neuroscientific contributions, is not disloyal to the specific approach of our discipline. Indeed, I believe that certain neuroscientific discoveries that allowed us to elucidate the neurobiological pathway of primary emotions, such as fear, are also useful in helping us understand several aspects of the dynamic of this mysterious condition, which projects a patient's own death in front of them, thus leaving them stunned. According to these neuroscientific hypotheses, the somatic anxiety (terror) that transforms the body into the repository of the drama of death derives from an improper activation, through the limbic system, of primitive neurobiological or neurochemical mechanisms that start from the amygdala and cause a short circuit of psychosomatic responses. In the course of the panic attack, psychological and biological mechanisms intersect and mutually reinforce each other.

The crisis, at the same time, necessitates a long preparation which results in a peculiar mental state, a kind of depressive condition unknown to the patients themselves, that makes them perceive themselves as if they were without defences and in a continuous state of alarm.

My viewpoint is that somatic symptoms that have a clear neurobiological origin are not directly connected to the conflict, but rather to a basic psychological and emotional constellation in which the function of containing anxiety has become lost.

I think that the panic attack is the expression of the failure of those unconscious functions which modulate and monitor emotional states. Under conditions of stress it is not possible to utilise that set of unconscious operations which are necessary for transforming emotional contents and for making them suitable to the functioning of psychic life. In a previous publication (De Masi, 2000) I defined as emotive unconscious that set of unconscious functions that allows for the continuous presence of those basic conditions that are needed by

emotional life. This is the function that can be selectively upset and create a certain predisposition to panic crises. In other words, what takes place is a breakdown similar to what happens in post-traumatic disturbances caused by stress, when an individual in a hypervigilant

state suddenly falls prey to terror attacks associatively linked to the traumatic episode.

The panic attack, which is a recurrent expression of a suffering of the self, indicates that the mind's protective membrane (Freud, 1920) has been torn. The triggering of symptoms, supported by a continuous interplay between psyche and soma, is linked to a micro-delusion (limited in time and space and connected to certain specific objects, places or thoughts) that has its origins in isolation and anxiety. The biologically predetermined neurovegetative response, in its turn, inflates the traumatic constructions in the imagination through the determining role of the anxiety coming from the body (somatic terror).

In the construction of a panic attack, we could differentiate three closely interconnected levels, from the bottom up. The lower level is under the control of the amygdala and can set off vegetative and somatic reactions. The intermediate level is that of traumatic memory and can build associative links and visual or amnesic images that become part of the catastrophic imagination. The top, third level is connected to personality structure, child experiences or psychic defences: in other words, to that complex dynamic configuration which not only gives rise to symptoms, but also conditions the patient's whole internal and relational world.

Depending on which etiopathogenic hypothesis is being considered, the various therapies are in fact only different in terms of the level at which they intervene. Psychoactive drugs, which operate at the lower level, try to decrease the intensity of the neurovegetative reactions set off by the limbic system and to fight the basic depressive state. Anxiolytic drugs increase the already present inhibitory neurochemical capacities (GABA) against excessive stimulation. Antidepressant drugs, on the other hand, increase the serotonine level that lowers anxiety and depression. Cognitive therapy, which intervenes at the intermediate level, tries to correct those fear-generating perceptive distortions through strategies involving deconditioning and the patient's progressive exposure to the terror-inducing stimuli. Both these approaches have as their goals freeing the patient from the symptoms of panic.

Psychoanalytical therapy, which considers the panic attack as a consequence of a disturbance in the area of personal identity and of a crisis of defensive organisations, aims to intervene at a structural and not merely symptomatic level. As I have said, sometimes panic symptoms disappear spontaneously in the course of the analytical process, while at other times the panic crisis persists and seems doomed to remain, to all intents and purposes, unchanged. Clinical experience has convinced me that in all cases it is essential to work during the session on the panic attack, focusing on it every time that it presents itself, and asking the patient to describe those sensations, perceptions or thoughts that preceded or accompanied it. It is possible, in this way, to begin to recognise how symptoms are formed, under which circumstances they are more likely to manifest themselves, and which role catastrophic imagination may play. Thus, the patient has a chance, in the course of the session, of reliving the traumatic event that can then be analysed, shared with the analyst and experienced in a potentially conceivable sequence. This kind of analytical work allows patients to acknowledge their own contributions to the occurrence of panic attacks and has the benefit of freeing new spaces and energies in the development of the analytical process.

However, I also want to emphasise that, beyond overcoming the symptoms, the road that leads to being forever free from these crises can only be completed successfully through an understanding of what is specific to the analytical experience and to the analysand's emotional growth. Such an experience is determined by the intimate encounter between that individual patient and that individual analyst—an encounter which, to my mind, cannot be replaced by any other therapeutic means that would merely have as its primary goal the disappearance or extenuation of symptoms. In this respect, I would like to emphasise the specificity of the analytical approach in contrast to the neurobiological and traumatic-associative components of the a-specific configuration of panic crises.

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