

PSYCHIATRIC ASPECTS OF  
ANAESTHESIA

AN ESSAY

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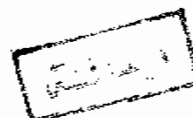
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## Contents

	Page
- Normal and Abnormal Emotional Responses of the Individual to Hospitalisation, Anaesthesia and Surgery .....	1
- Anaesthetic considerations of Patients with Psychiatric Troubles .....	27
- Psychiatric Complications of Anaesthesia and Surgery .....	65
- Psychiatric Problems Relating to the Anaesthesia Personnel .....	97
- Summary .....	103
- References .....	105
- Arabic Summary	



NORMAL AND ABNORMAL EMOTIONAL RESPONSES OF  
THE INDIVIDUAL TO HOSPITALISATION,  
ANAESTHESIA AND SURGERY

We all tend to fix ourselves on a course through life by reference to certain familiar Landmarks. Among these are places we know, routine habits, the expected reactions of familiar people, our relationships to loved ones etc. These all tell us where we are both physically and emotionally at any particular time and help us to feel secure in a world which is full of uncertainties.

When an individual is admitted to a hospital to become a patient, he is placed in a new world with its strange sights, sounds and smells leaving behind family, job, friends and possessions. The change in the way of life, the dehumanizing experience which includes accepting a number, a diagnostic label and surrendering responsibility for survival and existence to medical personnel bombards the sensory system of the individual. Even so called routine procedures such as examinations, ward rounds and investigations can be new and frightening experiences.

The ability to cope with new and strange environments decreases with extremes of age for example an elderly person, although self-sufficient at home, may quickly become confused, disorientated and agitated on admission to hospital. The sensory isolation of deafness or blindness combined with mild senile brain

changes can result in the development of a paranoid psychosis (Evans, and Evans, 1982).

The strangeness of the hospital environment increases in the specialized areas and of these, the recovery room, operating theatre, and anaesthetic room are relevant. Patients are not usually asleep when they leave the comparative sanctuary of the ward and familiar nurses are not always available as escorts (Beal and Eckenhoff, 1969).

Surgery is distinguished from other medical procedures in that actual invasions of the patient's body space occur. All surgical patients still have fears of being cut, fears of anaesthesia and unconsciousness, fear of pain, mutilation, disability, and perhaps death (Kaplan and Sadock, 1985).

The practising anaesthesiologist needs to be aware that each individual person will have his own notion of what hospitalization anaesthesia and surgery mean to him and that, as a result, he will react in his own special manner. The spectrum of emotional reactions ranges from moderate fear and anxiety at one end, through to acute confusional states and psychosis at the other (Eckenhoff, et al., 1962).

To understand the various responses of individuals to hospitalization, anaesthesia and surgery, two underlying theoretical concepts need to be clarified: the concept of psychological stress and the concept of coping.

### PSYCHOLOGICAL STRESS

Engel (1962) has defined psychological stress as all the processes which impose a challenge or demand upon the organism, whether originating in the external environment or within the individual. He described three principle categories of stress:-

1. Loss or threat of loss, of psychic objects such as personal relationships, prestige, body functions or image, social roles, job and valued possessions.

2. Injury or threat of injury involving notions of pain and mutilation whether actual or threatened.

3. Frustration of biological drive satisfaction, especially basic nutrient and libidinal needs.

Entering a hospital to become a patient includes all these categories of stress. For a number of people the prospect of a general anaesthetic is particularly stressful. The patient may be frightened of needles or that he might feel pain. He may be worried by the fact that someone else will be responsible for his breathing or other vital functions. "Will I hear, feel or see anything during the operation?", or "Will I say or do anything of which I will be ashamed?" are common questions put to the anaesthesiologist and just as commonly left unasked even though consciously considered. For some people the thought of suffocation and the concept of their own death is very disturbing, so that the anaesthesiologist will frequently meet patients which express a fear that they will not wake up (Schultz, 1957).



The manner in which an individual responds to the whole experience is not solely governed by his own characteristics, however, the surroundings, both the hospital environment and the people he meets in it, are additional potent influences that require consideration. Intelligence and social and cultural background are other factors which affect how the stressfulness of any event is perceived. With advancing age there is less resilience, energy and recuperative ability, so that stresses may have a greater impact. For children there are a number of very difficult mental tasks which are discussed later.

The type of illnesses, its onset, rate of progression and expected outcome, colour the picture still further. Certain organs carry a greater emotional charge than others: the heart is known to be central to one's very being so that operations on the heart may appear to be attacks on a person's very soul. Amputations or other disfiguring operations can, in their alteration of body image, also alter self-esteem. Women tend to be more affected by the prospect of disfigurement and men more by disablement with associated dependency (Kaplan and Sadock, 1985).

A past experience colours present reality, if the past experience was unsuccessful or incomplete, then the residual emotional charge surfaces and is re-experienced in the present so when anticipating a modern general anaesthetic, a patient may be re-living an earlier anaesthetic experience under less sophisticated conditions (Evans and Evans, 1982).

### COPING

Psychological stress disrupts a person's equilibrium and so challenges that person to find ways of coping in order to overcome the threat. An individual's characteristic coping style is determined by biological make up, early social experience and relationships, developmental progress, especially the level of maturation achieved, and by previous experience of psychological stress and successful ways of dealing with it. A person free of major mental conflict will have a more resilient, more flexible repertoire, can learn from a totally new challenge and enhance his repertoire for responding to stress so that the end result is emotional growth. Conversely, individuals with considerable internal conflict are restricted by their neurotic difficulties and are unable to adapt further.

Coping involves both mental mechanisms of defence and emotional responses.

#### (A) MENTAL MECHANISMS OF DEFENCE

The mental (cognitive) mechanisms, if used appropriately and in moderation, serve to absorb, reduce, deflect and eliminate the threat or the effects of that threat. They are therefore adaptive, and restore the mental equilibrium. However, when they are used to excess or inappropriately, they are maladaptive and fail to protect the individual who may then be overwhelmed and present with a psychopathological response (Okasha ,1980).

There are several mental mechanisms which can be identified:-

Repression:- The material that cannot be tolerated consciously is pushed into the unconscious; it finds expression in indirect ways.

Regression:- The stress of becoming a patient and requiring an anaesthetic releases the child within the adult so he can accept help and treatment. Excessive regression leads to increased dependency and demanding behaviour that cannot be satisfied by the hospital staff so that the patient feels ignored and uncared for, whilst the staff feel the patient is uncooperative. From his regressed dependent position, the patient projects into the medical staff a parental image (Janis, 1958).

Denial:- Facts or feelings which arouse are ignored or denied. A moderate degree of denial allows a sick patient to continue a full life. Complete denial, however, suggests serious psychopathology (Kaplan and Sadock, 1985).

Rationalization:- Involves making plausible, more socially acceptable, explanations to hide the real story, for example chest pathology is rationalized as a cold or gastrointestinal disease as food upset.

Projection:- Unpleasant or unacceptable feelings are externalized and ascribed to others. A patient unable to accept or express his own discontent with his treatment may describe staff as being discontented.

Intellectualization:- Ideas and painful feelings are separated in an attempt to understand at an intellectual level, facts that at a feeling level are very frightening. A patient may read avidly about his illness, the impending anaesthesia and surgery yet show no upset.

Depersonalization:- It is a mechanism whereby the distinction between self and nonself is blurred. The experience has a dream like quality so that it seems not be really happening (Okasha, 1980).

Derealization:- Involves distortion of the environment so that it seems changed or strange .

It is unusual for a single mechanism to be relied upon. Lipowski (1970) distinguishes two general modes of dealing with the facts and feelings of illness and injury. **Minimization**, where the person uses selective inattention, denial and rationalization, and **Vigilant focussing**, where the person insists on detailed information and meticulously observes all treatment regimes.

### (B) EMOTIONAL RESPONSES

Emotional responses are experienced subjectively as "feelings" but they may be accompanied by physiological or biochemical changes. The cognitive coping mechanism discussed above, if effective, will influence the intensity of the emotional responses favourably but some degree of anxiety or other emotion usually appears. Various specific emotional responses are presented by a patient preoperatively. Among such responses are:

Fear:- This is the normal emotional responses to threat. Anxiety is a state of apprehension or uneasiness, related to fear. Janis (1958) has linked the degree of preoperative fear with the degree of postoperative adjustment. He notes that people who experienced a moderate degree of preoperative fear were least likely to develop emotional disturbance during or after stress exposure. Preoperatively they were able to establish good relationships, ask for information, and so comfortably do some "worry work" or mental rehearsal and build up adaptive ways of coping. Persons who experienced a low degree of preoperative fear were likely to show poor postoperative adjustment and displayed anger and resentment towards staff. They used denial as a protective coat preoperatively and when this defence was removed by reality they were more upset during the actual threat period.

The task for the anaesthesiologist is how to initiate some worry work in such patients and at the same time provide reassurance. Patients with high preoperative fear tend to be neurotically anxious people.

The various specific fears which a patient presents preoperatively have been classified by Schultz (1957). These include the following : objections to anaesthesia; that he "may tell secrets"; that "the operation will start too soon", that he "may wake up during operation"; that he "May awaken after operation"; of suffocating; of mutilation; of vomiting; of cancer.

Norris and Baird (1967) analysed the factors producing anxiety in 500 patients. They classified about 60% as "anxious" and over half were expressing anxiety about the circumstances in which they found themselves. Fears about general health(31%), worry about the operation(38%), uncertainty about its outcome(26%), fear of anaesthesia itself(17%) and of postoperative discomfort(12%).

Sadness or grief:- Is commonly aroused when the threat is construed as one of loss whether it be real, threatened or fantasized. Actual loss of limb or breast requires considerable internal realignment but this only achieved after the grief has been fully felt and worked through to its natural conclusion of acceptance.

Shame: It may be precipitated by the feeling of being exposed to the eyes of others. Shame is often felt when there has been an alteration in body image as a result of deformity or disfigurement, but a person may also be ashamed of nakedness, smallness, feelings or weakness.

Guilt feelings: A person may feel that his illness is punishment for his innate badness (Jains, 1958).

Anger and hostility: They are part of the "fight or flight" pattern of response associated with self-protection.

Feelings of helplessness and hopelessness is ominous since these emotions herald a general "giving-up" which may lead to death, in spite of treatment.

Euphoria or elation:- The experience of these emotions may be related to emotional relief after the danger period has passed e.g. postoperatively, or they may represent a defensive reaction to ward off guilt or other unpleasant emotions.

Although the perception of stress and the manner in which the person responds is uniquely individual, it is possible to identify some common responses which are related to personality:

- (1) The dependent personality generally responds to stress with increased demands.
- (2) The orderly compulsive person cannot tolerate human failings or changes in routine.
- (3) The dramatizing histrionic person reacts with excessive emotional responses.
- (4) The long-suffering masochist awaits yet another painful experience.
- (5) The guarded paranoid individual misinterprets and mistrusts the world.