We would like to express our gratitude to Professor J. M. Ledingham, for his help in preparing the manuscript, and also to Mrs. Linda Allars for her secretarial help.

References

- ¹ Report of the Joint Committee on Maintenance Dialysis and Transplantation in the Treatment of Chronic Renal Failure. London, Royal College of Physicians, 1972.

- ² Department of Health and Social Security, *Annual Reports of the Chief Medical Officer*, 1968, 1969, and 1970. London, H.M.S.O.
- ³ Farrow, S. C., Fisher, D. J. H., and Johnson, D. B., *British Medical Journal*, 1971, 2, 671.
- ⁴ De Wardener, H. E., in *Ethics in Medical Progress*, ed. G. E. W. Wolstenholme and M. O'Connor, p. 104. London, Churchill, 1966.
- ⁵ Branch, R. A. et al., *British Medical Journal*, 1971, 1, 249.
- ⁶ McGeown, Mary G., *Lancet*, 1972, 1, 307.
- ⁷ Pendreigh, D. M. et al., *Lancet*, 1972, 1, 304.
- ⁸ Fisher, D. J. H., Farrow, S. C., and Johnson, D. B., in *Proceedings of the European Dialysis and Transplant Association*, vol. 8, p. 34. London, Pitman, 1971.
- ⁹ See *British Medical Journal*, 1972, 3, 251.

Emotional Problems in Childhood and Adolescence

The Anxious Child

ANNE BOLTON

British Medical Journal, 1972, 3, 690-692

Anxiety is an appropriate reaction to some circumstances of stress and danger, when the traditional "fight or flight" behaviour serves a useful purpose. Indeed, in man a conspicuous absence of anxiety when it would normally be expected is regarded as pathological. Thus, such an absence may denote either the excessive use of defence mechanisms or a diminished awareness or appreciation of a reality-based threat—a feature which may occur in some organic or psychotic states. In adults the ego is protected from anxiety that it would find intolerable by the development of defences: repression, denial and rationalization, displacement and projection, and reaction formation. In childhood these mechanisms are also used. Nevertheless, the immature organism can cope less well with abnormal stimuli and with anxiety-provoking situations, and one of the important functions of parent figures is to monitor these for the child so that he is not overwhelmed.

Abnormal Anxiety

Anxiety reactions in childhood may be regarded as abnormal when they cause appreciable and continued distress to the child, or to those concerned with him, or to both. They may result from essentially "normal" anxiety-provoking stimuli—that is, those which are ordinarily accepted as being stressful but which most children can tolerate. Examples of these stimuli include short separations for children who are old enough to bear them, new group adjustments such as school changes, or test situations such as examinations.

Some children are more vulnerable than others and will react excessively to such stresses. This vulnerability may arise in several ways: it may be the result of concomitant mental or physical handicap, of traumatic previous experience, of the lack of an adequate supportive environment, or of internalized emotional problems. On the whole the reactions of such children to "understandable" stresses of this kind are fairly readily tolerated by parents and others around them—even if these reactions take a covert form and are expressed by somatic symptoms or by mild behaviour difficulties. Most of them do not require specific treatment and the majority respond to accept-

ance and reassurance, often with some explanation of the symptoms to the child and to his parents.

More serious are the expressions of anxiety that is either not related to external situations or that is aroused by situations which do not usually produce anxiety, such as panic in the face of minor environmental change, persistent concern over attendance at school, or fear of a non-threatening animal. There is, of course, a wide variation in the individual threshold of anxiety. To some extent this may be constitutionally determined, though the environmental effects on a child of living in an anxiety-laden household may well be more important than any supposed genetic factor. The variation also depends on the child's degree of maturity and on his previous or continuing experience in terms of relationships. Over-protection which fosters over-dependence will increase anxiety—as will insecurity about acceptance and identity in the family. Identification with over-anxious or with damaged parents—whether this damage is real (in terms of illness or disability) or whether it is fantasied (in terms of the child's fears for his parents' safety)—may give rise to severe and longstanding anxiety.

Expressions of Anxiety

Anxiety may be expressed directly, in which case the child both feels and appears anxious. He may also show some of the physical symptoms of sympathetic activity which are regarded as normal concomitants, though these may be exaggerated—for example, sleeplessness, frequency of micturition, nausea, vomiting, and headache. Indirect expressions of anxiety may take the form of behaviour disorders, which often give a picture of a regressive clinging or of an aggression directed towards the object or producer of the anxiety; of somatic symptoms; or of neurotic manifestations, such as phobic symptoms, obsessional behaviour, or hysterical conversion symptoms.

BEHAVIOURAL SYMPTOMS

Within the framework of the regressive or aggressive behaviour, or both, there may be many disturbances of function. Sleep is often affected by anxiety and the typical pattern is one of a child who seems afraid to go to sleep. He may be obviously afraid of the dark, demanding to have the light on, or he may need constant reassurance of his mother's presence—either repeatedly calling out to her or insisting that she remain with him until he

falls asleep. He often wakes in the night and goes into his parents' bed. Of course, not all sleeping difficulties are associated with abnormal anxiety: it is customary for many children to go through a phase of avoiding sleep. Sleep means a detachment from reality, and it may be hard for some small children to achieve this.² The anxious child, however, is kept awake not by this kind of difficulty in detachment, but by the constant stimulation of his anxiety; such children are notoriously unresponsive to sedatives, even when these are given in heroic doses.

Eating is also commonly affected by anxiety, and not always as a loss of appetite. True, the tense and frightened child eats little, but the anxious child may also overeat and become overweight, especially if he is also depressed.

Other Problems

Other functional problems may occur. Enuresis, usually at night—but probably indicating greater disturbance if it occurs in the day as well—may at times be almost the only obvious expression of anxiety in a child whose infantile demands are not being met and can only maintain his dependence on his mother in this way. It is of vital importance to try to evaluate what the disturbance means to the child, in terms of both his outer (environmental) and his inner (psychic) worlds.

Many anxious children present as school problems, often showing incipient or frank school refusal,² with or without associated somatic symptoms. Other children, though they may have no difficulty in actually attending school, are under-functioning educationally and may be chronically anxious or depressed. Anxiety and depression can result in profound learning blocks which cannot be overcome by purely teaching methods. Preoccupation with internal problems may leave a child with no room for academic achievement. Other children are unable to learn because of the intense anxiety caused by sibling rivalry and yet others are hampered by the anxiety raised by the relinquishment of the infantile role which is implicit in school learning. Such children can be regarded as those whose behaviour difficulties are mainly regressive, while in others the aggressive element may be more obvious. Children who are—either consciously or unconsciously—expected to carry out their parents' own unfulfilled academic ambitions may deal with the anxiety thus aroused by a refusal to learn.

The distinction between regressive and aggressive behaviour is often not clearly defined and there may be many aggressive features in pathologically regressed behaviour. The child who clings to his mother and who shows acute separation anxiety over leaving her may nevertheless also be attacking her by his clinging behaviour, especially if she has found his dependent demands hard to meet in the past.

SOMATIC SYMPTOMS

The somatic symptom which is most frequently seen as an expression of anxiety is pain; this occurs about three times as commonly in the abdomen as it does in the leg.³ Nausea, vomiting, headache, and recurrent pyrexia may also be frequent complaints. In such cases careful physical investigation will show no evidence of organic disease, and if this has been carried out and the symptoms persist psychiatric evaluation should be undertaken without recourse to further tests. Repeated referrals for second, third, and fourth opinions on whether physical disease is present only strengthen the child's defences—and, more importantly, those of the parents—and establish behaviour patterns more firmly. But the psychiatric assessment must be regarded as a positive procedure and on a level with the physical one. It is unhelpful to the child, to his parents, and to the psychiatrist if psychiatry is viewed as a last hope, and parents readily become aware of the unconscious rejecting

or punitive feelings which accompany referrals made in this way. In any case, it is hard for many parents to accept the possibility of emotional disturbance in their child and they would greatly prefer an organic answer to the problem. Such an answer could mean a cure by medication or surgery in which they could obviously play no active part and which would not invoke the exploration of potentially distressing feelings in themselves or in their child. They may have, as it were, a vested interest in the maintenance of the physical symptom and in finding a physical solution to it. It is sometimes easy to collude with this wish through one's own anxiety, and the doctor must be aware of the danger of doing so.

NEUROTIC SYMPTOMS

Behind, or involved in, any neurotic symptom is a large measure of anxiety, whether this is manifest, as in phobic states, or denied, as in hysterical conversion syndromes. Children who show truly neurotic patterns of behaviour almost always need the help of a skilled psychiatric team which can work with them and their families, and little can usually be gained by attempts to help them symptomatically by reassurance or by placebo medication. The role of the family doctor may, however, be of great importance in helping the child and (often to a greater extent) his family to accept the need for such skilled help. Too often the implications of a referral to the child psychiatry service have not been adequately explained on a purely factual level to the parents and they may regard it as a rejection or a punishment or as a devaluation or condemnation of themselves as parents. If they can be given the opportunity to express some of their fears before the referral is made they are much more likely to accept such help as can be offered.

Some children (and parents) clearly need help but seem unlikely to be able to accept it at once. There is much to be said for trying to conduct a "holding operation" in such cases—that is, maintaining contact, accepting the disturbance (including the resistance to what appears to be essential treatment) with an attempt to establish a relationship within which a referral can eventually be made.

Management

Adequate assessment of the total situation is of paramount importance. This need not necessarily be undertaken by a child psychiatrist; often the general practitioner, with his knowledge of the family, has a very clear idea of the dynamics involved. Sometimes an anxiety-laden situation is amenable to explanation and to reassurance of the parents with an offer to the child to talk to an uninvolved but understanding adult. If the difficulty does not resolve with this approach—either because of the parents' rejection of the evaluation or because of the child's inability to use the relationship offered—probably the problem is a more truly internalized one and expert assessment of the family dynamics with a consideration of the need for psychotherapy is indicated.

External factors must be taken into account and overwhelming and unnecessary stress alleviated when possible. A dull child may be being subjected to undue academic pressure, which, if recognized, can be reduced. Another may have particular difficulties on account of a handicapped sibling, a fact not recognized by his family. A further factor which may cause great anxiety is parental depression, particularly if this occurs in the mother. Such depression can remain unrecognized clinically for a long time, sometimes for years. Depressed mothers increase their children's anxiety in several ways. They may demand an overattachment as a defence against their own depression, or the child himself may become depressed and anxious because of his mother's withdrawal from him because of her depression. Yet again, the child may fear the suicidal aspect of the depression,

especially if his own negative feelings towards her are strong and cannot be acknowledged. Many children improve greatly if their mothers' depression can be relieved. This may, of course, necessitate psychiatric assessment of the mother and possibly psychotherapy or the use of antidepressants.

DRUG TREATMENT

On the whole drugs have a small part to play in the management of anxiety in children. There is a place for tranquilizers such as chlordiazepoxide and diazepam on a short-term basis. Sometime these may help in crises such as examinations when there is not time to deal adequately with the underlying problem. They may also be useful for a limited period when the child is in the process of giving up his somatic symptoms and is therefore having to deal with the anxiety which lies behind them. Nevertheless, drugs should never be regarded as more than temporary expedients. Unless and until the underlying disturbance can be resolved the anxiety will persist, though the symptoms may change—for symptoms in childhood are not as firmly entrenched as they are in adults. Children may show overt anxiety at one time, phobic or obsessional symptoms at another, and, yet later on, signs of disturbed behaviour.

Behaviour therapy has been used successfully in some phobic conditions,⁴ occasionally other approaches may help a child by

giving him a face-saving reason for giving up a symptom—as, for example, the use of physiotherapy in treating hysterical paralysis.

Prognosis

This depends partly on the cause and production of the anxiety and partly on how far the dynamic interactions concerned can be modified. Children who react excessively to stresses may be helped to adjust but unless some radical change is effected they will almost certainly tend to over-react to stress in the future. The number of anxious parents of anxious children who themselves give a history of overanxiety in childhood supports this view, but this is no argument for inactivity. If insight in itself is no universal panacea, at least awareness can help to mobilize defences and, one hopes, lead to greater maturity.

References

- ¹ Freud, A., in *Psychiatric Aspects of Paediatrics*, ed. R. Mackeith and J. Sandler. Oxford and London, Pergamon Press, 1961.
- ² Hersov, L., *British Medical Journal*, 1972, 3, 102.
- ³ Apley, J., in *Psychiatric Aspects of Paediatrics*, ed. R. Mackeith and J. Sandler. Oxford and London, Pergamon Press, 1961.
- ⁴ Eysenck, H. J., and Rachman, S. J., in *Modern Perspectives in Child Psychiatry*, ed. J. G. Howells. Edinburgh and London, Oliver and Boyd, 1965.

Therapeutic Conferences

Diabetes Mellitus: The Thin Maturity-onset Diabetic

FROM THE DEPARTMENT OF THERAPEUTICS AND CLINICAL PHARMACOLOGY, UNIVERSITY OF ABERDEEN

British Medical Journal, 1972, 3, 692–694

DR. J. C. PETRIE: Oral hypoglycaemic drugs have received considerable adverse publicity recently because of reports of increased mortality from cardiovascular disease in patients on long-term therapy. The evidence has been criticized on several aspects.^{1 2}

DR. J. M. STOWERS: Even so, in Britain at this time many patients are taking oral hypoglycaemic therapy and the status of these drugs is being actively re-evaluated. The indications and contraindications for oral therapy must be clearly understood and the drugs should be used only after careful consideration of the possible risks and benefits of long-term therapy.

The patient to be discussed will illustrate some of these points.

Maturity-onset Diabetes Mellitus—Weight Loss

HOUSE PHYSICIAN: This 60-year old man, a known diabetic for four years, has complained of thirst and lassitude increasing over the last two months. Recently he has noted that the specimen of urine passed before breakfast contains at least 2% glucose

without ketones. Blood sugar levels measured at the clinic have shown a consistent hyperglycaemia, two hours after breakfast, of around 250 mg/100 ml. He has been on treatment with chlorpropamide since his diabetes was diagnosed and for the last six months he has been on 500 mg daily.

DR. R. A. WOOD: This patient had excellent control of hyperglycaemia for the first three years of sulphonylurea therapy. This was started because when he was initially referred he was just under his ideal weight. He showed overnight glycosuria as well as glycosuria during the day and so we chose a sulphonylurea, whose action would continue throughout the night—chlorpropamide.

Chlorpropamide is usually given with a meal in an initial dose of 100 to 250 mg/day and this is increased, if necessary, over some months to a maximum of about 500 mg/day. It is given in a single dose because it acts for longer than a day. The drug is strongly bound to plasma proteins and is excreted largely unchanged. So it should be used with caution if there is renal insufficiency, as severe and prolonged hypoglycaemia may develop.

INDICATIONS FOR SULPHONYLUREAS

DR. STOWERS: Sulphonylureas are best avoided in patients who are more than 10% over their ideal weight because these drugs tend to be associated with an increase in weight.

The sulphonylurea drugs should be used for treating patients

Appointments of Speakers

J. C. PETRIE, M.B., M.R.C.P., Senior Lecturer
J. M. STOWERS, M.D., F.R.C.P., Consultant Physician
R. A. WOOD, B.Sc., M.R.C.P.Ed., Lecturer