Canad. Med. Ass. J.
May 18, 1968, vol. 98

THE CANADIAN MEDICAL ASSOCIATION JOURNAL
LE JOURNAL DE L'ASSOCIATION MÉDICALE CANADIENNE

May 18, 1968

DEATH IN CHILDHOOD

THE death of a child is always attended with particular poignancy. That this has always been so is attested by its inclusion in story-telling from the earliest times. One can think of Chaucer's "litel clergeon" of the Prioress's tale and all the way up to Paul Dombey and Little Nell and later. This applies even though what appears to us, in our generation, as an appalling mortality in infancy and childhood, and confirmed by a saunter through the older parts of our cemeteries, was throughout history accepted as a fact of life. The child's evening prayer of a generation or two ago was

> If I should die before I wake,
> I pray the Lord my soul to take.

Many a school classroom choir sang the words of Eugene Field:

> But as he was sleeping, an angel song
> Awakened our Little Boy Blue.

Today, when the diseases which snatched away countless children have been vanquished one by one, the death of a child seems an even greater tragedy than it ever was.

Many deaths in youngsters are the result of violent accidents, on the road and elsewhere. These are sharp and sudden tragedies, to be suffered by the parents, not the victim. The other situation, that concerns us here, is when the diagnosis of an inevitably fatal disease has been made. Then the parents must be told of the unalterable prospect and the child has to be supervised and cared for during the course of an illness whose fatal outcome is always in mind.

There is a dearth of guidance for the physician confronted by this emotionally charged situation. There are many problems involved and certainly far more questions than there are answers. Nevertheless several thoughtful articles by pediatricians have appeared on this subject and these are decidedly helpful. Some parents have described in detail their reactions to the announcement that they would be bereft of their child and have told how they behaved and managed in the remaining time they had with him. John Gunther gave such an account in the book which took its title from one of John Donne's Holy Sonnets, "Death Be Not Proud". This attained a wide circulation and made an impact on many people.

The task of informing the parents falls to the doctor in charge of the case and cannot devolve upon a junior or a resident, even when it is not a private patient that is concerned. Granted, there are residents whose personality and resources of sympathy do qualify them for this difficult role, but parents are entitled to consideration from a senior practitioner so that his reputation for wisdom and understanding can give assurance that the problem is receiving all the thoughtful attention that is available.

Although possibly there are instances when it is better that the mother should learn the news from her husband, it is surely better that both parents should be interviewed together. It need hardly be mentioned that this interview should not take place in a hospital corridor or in the clinical atmosphere of a ward, liable to interruption by telephone or nurses. The doctor and the apprehensive parents should be able to talk together in circumstances of quiet and comfort.

In the case of a child with leukemia or a malignant tumour one may seek to spare the parents the full weight of the blow at a first interview by emphasizing the seriousness of the illness with only a mention that the child may not recover. The actual diagnosis can be withheld until a later occasion. But if a direct question as to diagnosis is asked, it is best not to equivocate. The doctor must be absolutely sure of the accuracy and finality of the diagnosis in these circumstances. Any remarks about technical details to impress the parents, any assumption of credit for the elucidation of the case, must be eschewed. Verbosity and repetition do not convey the kindness that is intended and that is best communicated by a few words spoken with gentleness and gravity.

There are certain questions that are bound to be asked. How long can life be expected to last? Will the child have to remain in hospital throughout the course of the illness? Will he suffer much pain? What should the other children be told? Not only should time be taken to give considered answers to these questions, but it must appear to be given willingly and ungrudgingly. And assurance should always be given that further questions, which are bound to present themselves later, will be welcomed and answered as best one can, that further interviews can be arranged to discuss aspects of the case as they arise.

Canad. Med. Ass. J.
May 18, 1968, vol. 98

If the opinion of a consultant is mentioned, there should be no hesitation in complying, for the impression above all that one wishes to give is that nothing will be withheld that might offer even a shred of help.

Often the parents' minds will dart restlessly about in search of some failure or error on their part that may have influenced the situation. It may take repeated reassurance to disabuse them of what may seem almost an eagerness for self-reproach. It is only later, after friends and relatives have been told, that the suggestion may come that some unorthodox treatment at the hands of an unqualified practitioner to whom publicity has accrued, may be able to accomplish what regular means cannot. This is no time for indignation or taking affront. Quiet dissuasion is likely to be effective in preventing the raising of false hopes and the wasting of savings.

In those diseases where remissions can be expected, there is every reason to encourage the discharge of the child from hospital when supervision can be continued on an outpatient basis. This is so only when the home circumstances are favourable, but one must remember that what does not appear so to the doctor can be entirely acceptable to the patient. The other children in the household can be told that their brother or sister is not yet completely well and may have to return to hospital later. There will be a temptation to over-indulge the child and this is understandable, but it is better for all concerned if the order of the home is maintained on as natural a level as possible. Trips to Disneyland for such children are described in the press and receive enthusiastic support, but the contribution to the child's happiness is open to doubt. It is the parents who derive benefit from this sort of undertaking, for they are afforded the satisfaction of knowing that they spared nothing which would bring enjoyment. Since it is a means of demonstrating their love, it is not to be derided or brushed aside.

The role of the clergy in this situation cannot be easily defined. Naturally if there are close ties between the family and the church or synagogue, the spiritual adviser can be of tremendous help in supporting the parents and enabling them to face and accept permanent separation from their child. It will be realized that not all members of the clergy have the personality or temperament which fits them for these circumstances, just as it is true that many doctors, likewise, can be awkward or fail in this special role. While the personal priest or minister or rabbi will have a distinct advantage, if the family has no definite religious affiliation a call to the chaplain attached to the hospital can be suggested; in our day he is likely to be experienced in bringing help to the situation.

What of one's attitude towards the child patient? These days the older children, at least, know something about cancer and leukemia. Obviously the confused and conflicting views about what or how much to tell the adult patient about his mortal illness do not apply here. Only a simple explanation should be given for the failure to recover quickly or for the return to hospital. A child does not press for a complete account of his disease, and gentle reassurance about getting better soon, should suffice. As the course draws to a close there is the natural and merciful narrowing of awareness and lapse into listlessness that Nature provides most of us, at whatever age our exitus. Instances of mental alertness to the end, so often portrayed by novelists of the older schools, are rarely seen. The doctor's attitude throughout must be one of controlled optimism. He will never fail to draw attention to ways in which his patient is feeling better and to express hope for even more progress in the days ahead.

Visiting privileges will be granted when the terminal phase of the illness is entered. Often the mother will have satisfaction from helping in the nursing of her child and as far as is practicable this should be permitted.

A child brought up in our society has an acquaintance of a sort with death. He is familiar with scenes of violence from his exposure to the cinema and television and in his games he will enact death. But few children probably think of death as applied to themselves, even though they have had schoolmates who have been killed in a road accident. He often recognizes that it is a forbidden subject and when he is ill he may avoid mention of his fears to his parents. Those fears may be increased by the attitude of intense concern that his father and mother cannot conceal. He may therefore allude to them only to the nurse or to someone less intimately involved in his care. In the main he is more likely to be anxious about his discomforts than about dying. Other children in the household may display an acceptance of death of a brother or sister that can surprise us somewhat. When we see them out playing on the day of the funeral we may be disturbed a little, for we tend to sentimentalize the occasion.

The doctor should understand that possibly by his very attitude he may be of more service than by any words he can find. He can enable the parents to sense that he identifies himself with their anguish, as another human being as well as a doctor. At the same time he must preserve his objectivity; by failing to do so he

will not only increase his own burden but he will render himself less fitted for the task of dealing with the medical problems of his patient. Often there can be a temptation, in the course of a lingering fatal illness, to omit daily visits, or at least to welcome trivial reasons for failing to see the patient regularly. It is a heavy task always to generate hope and assurance, and there will be occasions when he will indeed feel that virtue has gone out of him.

The final phase of the illness should be conducted with dignity and decorum. This is not a time for heroic measures, designed possibly to impress the parents but more likely to provide an outlet for the concern of all who are in attendance. Therapy known to be of no use in affecting the outcome has no place; the only treatment is that which will relieve symptoms and prolong life in comfort. The patient should not be allowed to suffer pain or be distressed by investigative procedures.

The doctor can help to bring some restraint into a situation which invites indulgence in sentimentality and uncontrolled grief. He can try to persuade the family to accept mortality as part of our humanity and to be grateful for the time the child was given them. As the quiet lovely notes of the little organ prelude of J. S. Bach remind us, "Alle Menschen müssen sterben."

BIBLIOGRAPHY

1. GUNTHER, J.: Death be not proud, The Modern Library, New York, 1953.
2. HOWELL, D.: *J. Pediat.*, 1: 2, 1966.
3. KOOP, C.: *Bull. Amer. Coll. Surg.*, 52: 173, 1967.
4. YUDKIN, S.: *Lancet*, 1: 37, 1967.
5. EVANS, A. E.: *New Eng. J. Med.*, 278: 138, 1968.
6. GREEN, M.: *Pediatrics*, 39: 441, 1967.
7. SOLNIT, A. J. AND GREEN, M.: Pediatric management of the dying child: Part II. The child's reaction to the fear of dying. *In*: Modern perspectives in child development, edited by A. J. Solnit and S. Provence, International Universities Press Inc., New York, 1963, p. 217.
8. *Idem*: *Pediatrics*, 24: 106, 1959.
9. VERNICK, J. AND KARON, M.: *Amer. J. Dis. Child.*, 109: 393, 1965.
10. DE VRIES, P.: The blood of the lamb, Little, Brown & Co. Inc., Boston, 1961.

TESTS OF GASTRIC SECRETION

THE gastric mucosa secretes mucus, hydrochloric acid, the pepsin group of enzymes, a blood maturation factor, and the hormone gastrin. Since the hydrochloric acid secretion is easy to collect and measure, it has received the greatest share of attention in attempts to assess gastric function. At least three separable pepsins have been identified in gastric juice; estimations of these, however, are difficult and lengthy and correlations with clinical manifestations of disease have been poor. Intrinsic factor may be assayed, but the Schilling test for pernicious anemia gives as much practical information and is easier to perform. For clinical purposes, therefore, tests of gastric secretion are confined for the most part to those that measure the acid-secreting ability of the stomach.

Although acid in the stomach has been recognized for some 200 years, interest in its secretion has been accelerated in the last 15 years by the introduction of the augmented histamine test[1] in which concomitant administration of an antihistaminic drug permits the use of larger doses of histamine for the stimulation of the parietal cells in the body and fundus of the stomach. The resulting secretion is expressed in milliequivalents of hydrochloric acid and indicates what quantity of acid can be secreted in a unit of time following a maximal stimulus. The availability of this reliably repeatable test should confine the time-honoured alcohol and gruel "test meals" to the history books. The 12-hour overnight collection of gastric juice is also probably of little value since it cannot be used to discriminate clearly between states of health and disease. An exception might be made when the Zollinger-Ellison syndrome is suspected; however, even in this condition similar information may be obtained by collecting the gastric juice in the basal hour just before the maximal stimulation tests. In this rare disease, the resting secretion is at least 45% of the maximal output in the post-histamine period.

Gastric analysis is now frequently performed using a weight-related parenteral dose of betazole hydrochloride (Histalog) which is closely related to histamine.[2, 3] This drug produces fewer side effects than histamine, making it unnecessary to administer an antihistamine. Experience has shown that reliable results from the Histalog test can be obtained only when meticulous attention is paid to the details of its performance. A high dose must be given and should probably be no less than 2 mg. per kg. of body weight. Using fluoroscopy, a transnasal sump-type tube is inserted into the most dependent part of the fasting subject's stomach. The entire test must be monitored by trained personnel, and it is important to ensure patency of the tube and a good flow of gastric juice throughout. The test cannot be performed by an absentee observer because, quite apart from the technical considerations, severe hypotension and other reactions occasionally do occur. Using continuous suction, the resting juice is discarded and a one-hour basal sample is collected. Histalog is given parenterally and samples of gastric juice are collected every 15 minutes for a period of one to two hours. Each sample is titrated against a standard solution of alkali and when the result