Relief of pain in terminal cancer

- Ascertain the nature and source of pain.
- Plan a prophylactic four hourly oral drug routine and prevent pain developing.
- Maintain treatment by mouth for as long as possible.
- Use morphine as the drug of choice in oral treatment; diamorphine may be preferred for parenteral administration.
- Disregard fears of tolerance and addiction.
- If oral analgesics fail to relieve pain explore other resources, nerve blocks, radiotherapy.

movement and student conditioning in a hospital environment, they may initially tend to see the solution to terminal care in the provision of more specialised units and a detachment of terminal care from the work of generalists, in hospital and general practice. Recent data⁴ show that 59% of all deaths take place in hospital and 30% at home. Many patients, however, are admitted to hospital only a few days before death. Most people would prefer to die in their own homes assuming adequate support is available. In this respect the inadequacy of night nursing support is often a big factor. Other factors are intractable physical, mental, and social problems—for example, severe incontinence and bed sores, mental confusion, intractable pain, and failure on the family's part. The role of the family doctor should be to alleviate distress and misapprehensions surrounding death, supported ably by the nursing team and social services. We teach integrated community care, the general practitioner assuming overall responsibility for home care. He can obtain advice and support at any time from his local hospital or hospice.

The hospice—Students are encouraged to see the hospice as a centre with specialised staff and facilities structured to meet the emotional, spiritual, and physical needs of terminally ill patients. The Marie Curie Homes are discussed in the same context. In many areas the hospice provides day nursing and other support to help the

primary health care team to provide the best possible care in the community. The hospice is also depicted as a research centre in which staff work to develop new techniques to solve complex clinical and social problems associated with terminal illness. Our teaching does not presuppose that most patients who are terminally ill need to be in a hospice or other special unit. The ideal in each health authority area would be to have an integrated terminal care service which would embrace general practice, hospital, and special unit.

Conclusion

These therefore are the objectives and subjects covered by the interdisciplinary teaching session on terminal care. In a further article, next week, I shall describe the format of the teaching session and the methods by which students are assessed.

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For Debate . . .

Certifying death in infancy

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For almost 150 years death certificates have formed a basic record of the most serious effect of disease on a population. Observations of changes in patterns of mortality have provided a measure of the effect of changes in the biosocial conditions of populations or in the medical management of diseases.

Perinatal mortality

Perinatal mortality, defined as the incidence of stillbirths and deaths to the end of the first week of life, has been extensively studied¹ and used as a measure of outcome of pregnancy in women

of varying biosocial characteristics delivered under differing patterns of health care. The interpretation of data on perinatal mortality is often confused by doubts about the definition of the populations to which published data refer and by the use of different forms of registration and certification to record information about causes of stillbirth and death.²

CURRENT CERTIFICATION

At present in the United Kingdom two different forms of certificate are used to record cause of death in stillborn and liveborn infants, and the obvious shortcomings of these documents have led the authors of the *Second report* from the Social Services Committee on Perinatal and Neonatal Mortality to record, "we were unhappy about the forms used for the medical certification of perinatal deaths," and to recommend that, "certificates for stillbirths and deaths of infants occurring within the first month are amended

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to make the information collected on cause of death identical. Further, certifiers should be encouraged to show any maternal conditions contributing to the death, as well as conditions in the child or fetus."³

PROPOSED CERTIFICATION

New certificates are currently undergoing trial by the Office of Population Censuses and Surveys, separate ones being used to refer to stillbirths and live births so as not to obscure the clear legal definition of each, and the recently published follow up to the *Second report*, noting that the earlier recommendation has not been met, has recommended the "speedy production" of the revised versions of stillbirth and neonatal death certificates.⁴ Before any new certificate is introduced, however, further consideration must be given to the age limit up to which it should apply as there is evidence that, by restricting it to the first month, the chance may be lost to obtain important information on deaths at later stages of infancy that are attributable to "birth determined" causes.

Why the age limit should be extended

Figures recently published by Macfarlane and Mugford show the failure of late neonatal and post-neonatal death rates to fall in the way that rates of stillbirths and early neonatal deaths have done in recent years.⁵ Although the deterioration in social conditions in many parts of the United Kingdom in the late 70s may partly explain the static rates, it can be argued that the developments in neonatal special and intensive care are delaying but not finally preventing the deaths of some very ill, small infants; and thus any document aimed at contributing to our knowledge of the causation of unsatisfactory outcome of pregnancy should apply to these later deaths.

An examination of infant deaths in Northern Ireland shows the importance of birth determined causes of deaths throughout the first year of life. Some 178 infants born between 1 January and 31 December 1982 died between the ages of 7 days and 1 year. Inspection of the certified causes of death indicated that in 89 cases (50%) the cause of death was birth determined, being due to prematurity in 29 cases, congenital malformation in 53, and other disorders determined at birth in seven. The certified cause in 63 of the remaining cases was "interstitial pneumonia" (the usual designation for sudden, unexpected death in infancy in Northern Ireland); the other 26 deaths were due to accident or acquired disease. These figures for birth determined causes are remarkably similar to those reported from Glasgow by Arniel *et al* (table I).⁶

The figures for Northern Ireland (table II) show that 140 of the 178 post-perinatal deaths occurred after the age of 27 days and 59 of

TABLE I—Number (%) of deaths at age 7 days to 1 year in Glasgow and Northern Ireland due to particular causes

Cause	Northern Ireland	Glasgow
Birth determined:		
Prematurity	29	56
Congenital malformation	53	59
Other	7	6
Total	89 (50)	121 (50)
Cot death	63 (35)	108 (44)
Accident or acquired disease	26 (15)	15 (6)
Total	178 (100)	244 (100)

TABLE II—Number (%) of deaths at age 28 days to 1 year in Northern Ireland, 1982, due to particular causes

Cause	No	(%)
Birth determined:		
Prematurity	15	(10.7)
Congenital malformation	43	(30.7)
Other	1	(0.7)
Total	59	(42.1)
Cot death	59	(42.1)
Accident or acquired disease	22	(15.7)
Total	140	(100)

these (42.1%) were from birth determined causes, yet the social services report recommends applying the new certificate only to deaths up to 28 days after birth. To record these later deaths using existing death certificates would be to fail to collect information about various factors that will be available on deaths before 28 days from similar causes certified by the new document. A knowledge of the contribution of such factors to all infant deaths forms an important part of the study of the epidemiology of conditions such as prematurity, which, while they may take their major toll shortly after birth, continue to jeopardise survival in later months of life. The new certificate must be a certificate of infant death.

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Can piano playing prevent the onset of Dupuytren's contracture of the fingers, and can it diminish the amount of contracture after the disease has started?

There is no evidence in recent publications that specifically comments on the effect of piano playing and the onset of Dupuytren's contracture or, indeed, on the value of this exercise once the disease has developed. The aetiology of this condition has been widely written about but the solution is as much an enigma as when Dupuytren described it in 1831. It is known to be a European disease, being rarely seen in non-Caucasians. The role of inheritance and its association with epilepsy are well proved.^{1,2} Of more relevance to this question, however, is the relation of trauma to the development of Dupuytren's contracture.

The condition is not seen more commonly in manual workers than in clerical workers, and the dominant hand is not more frequently affected.³ Specific digital injuries may, rarely, give rise to a form of Dupuytren's, but this is not commonly seen after palmar injuries. Skoog drew attention to the fact that the longitudinal fibres of the superficial palmar aponeurosis were involved in the contracture but that the deeper transverse fibres of the aponeurosis were unaffected.⁴ He suggested that longitudinal traction injuries might be a factor in producing the hyperplastic palmar nodule that is the essential structural component of Dupuytren's contracture. Collagen

does not itself contract under physiological conditions and therefore the force required to produce the contractures must be a result of an activity within the hyperplastic area. The relation of the palmar aponeurosis with the overlying dermis is also relevant because Dupuytren's does not recur beneath a skin graft.⁵ There is considerable doubt as to the relevance of longitudinal trauma, and indeed whether piano playing would be sufficient to produce such trauma.

Is there any evidence to suggest, however, that trauma (such as piano playing) could influence the contracture after the disease has started? After fasciotomy the thickened bands rapidly atrophy, so work hypertrophy may be a factor in the band contracture, and perhaps continued piano playing after the disease has developed is more likely to intensify the contracture than to improve it. Although many interesting aetiological factors are known, there is insufficient evidence to advise a patient to restrict his piano playing either to prevent or to diminish Dupuytren's contracture.—DOUGLAS H HARRISON, consultant plastic surgeon, London.

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