in his full series of 66 biopsy specimens included cryptogenic fibrosing alveolitis (27), sarcoidosis (15), eosinophilic granuloma (5), and malignant disease (4); the diagnosis was not established in a further 8. He concludes by mentioning that recent advances in chest medicine, due in part to knowledge gained from lung biopsies, are such that the nature of diffuse lung disease in individual patients can now usually be deduced from other and less traumatic methods of investigation and that in future biopsy is likely to be used even less often than it is at present.

One of the criteria for lung biopsy has always been that there should be a treatable disease in the differential diagnosis. This still holds for localized pulmonary disorders, most of which are now identified in frozen sections at thoracotomy. For diffuse processes this is rarely so. Fibrosing alveolitis and sarcoidosis seem to yield the greatest number of positive results. Details of the morbid anatomical appearances might possible influence a decision about corticosteroid therapy, but other considerations are likely to be more important. Proof that malignant disease exists would certainly affect management and possibly specific treatment. Rarely, lung biopsy discloses such conditions as periarthritis nodosa and chronic pneumonia, about which clinicians would obviously wish to know. It remains too a comparatively simple surgical operation when refined methods of diagnosis, particularly in the field of immunology, are not readily available. We have not yet heard the last of biopsy in diffuse lung disease, but we have learnt enough in the past 20 years to realize that it should not be undertaken without very good reason.

Mothers of Premature Babies

Study of the behaviour of animals has provided an interesting and challenging occupation for psychologists and, indeed, fascinating thought-provoking material for the paediatrician. Many animal species have an instinctive urge to lick or handle their young at the moment of birth. If the young are removed so that the instinct cannot be satisfied and are then returned to the mothers and allowed to kick them to death (in the case of sheep and goats1 2, 3), eat them (in the case of rabbits4 5), or otherwise reject them (in the case of cats, dogs, monkeys, deer, mice, and other animals6 7 8 9), the removal of pups from rats for two to four days after birth "sharply reduces the maternal responses." Continuous association with actively suckling young is necessary for the development of normal maternal behaviour. In other words, the mother's behaviour is dependent on stimulation by the young. Not only does this separation of the young from the mother at birth adversely affect the mother's responses and her efficiency as a mother, but it may have an adverse effect on the animal's behaviour for the rest of its life. The rat, sheep, or other animal when it grows up and has its own young is apt to be an inefficient mother, much looking after its young properly, so that there is a high mortality.

It is easy to suggest that the behaviour of animals has no bearing on the behaviour of human beings, but it is a mistake to be too negative about lessons which can be learnt from animal behaviour. We know that premature babies fare less well at school than full-term babies of the same level of intelligence and suffer more troublesome behaviour problems, but the reason is unknown.12 For many years certain South African hospitals have expected mothers to look after and feed their own premature babies in the premature baby nursery; and some hospitals in Britain encourage mothers to handle their own premature babies, feeding and cleaning them. American fears that mothers would introduce infection into the premature baby nursery proved unfounded.13

Now a team at the Stanford University School of Medicine in California has described the psychological implications of allowing 41 mothers to handle and later feed their premature infants at any time of the day or night, after previous instruction in hand washing, masking, and gowning. The mothers liked it—except two who had been told that their babies would probably die; the nurses became enthusiastic about the experiment; and the doctors found that there was no increase in the incidence of infections. No one found that the work of the ward was being disrupted.

It may well be that the immediate postpartum period is the most important time for the initial contact between mother and child, as it is in animals. Many (but certainly not all) mothers feel the urge to have skin contact with the baby immediately he has been born; they think that it is important that they should be fully conscious, and not under an anaesthetic at the time of delivery; and they want to put the baby to the breast immediately.

No one has proved that it is desirable for the mother or the premature baby that this close contact should be established immediately after birth or later during the period in hospital or that absence of contact does any harm. One cannot prove "everything, and not everything is worth trying to prove. Great experience of time and effort may be into trying to prove something for the sake of proving it: something which, though important in itself, is not worth trying to prove, perhaps because the answer seems obvious. There are occasions when one has to make medical decisions on the basis of common sense and on what seems natural and normal.

In Britain it seems natural and normal for a mother in a maternity hospital to have her full term baby not in a nursery but at her bedside, so that she can admire him, gloat over him, show him off, and display his beauty, pick him up, cuddle him, and feed him as soon as he cries from hunger. To many it seems natural and normal to allow at least some children to visit their mother in a maternity hospital14 (or their mother or father in another hospital), as has been suggested in these columns. It would be natural and normal for a mother of a premature baby to be helped to feel close to him, to feel that the baby in the box is hers, to maintain contact with him in hospital from the time of delivery to the time when she leaves for home where she will have to do everything for— and to feel the great satisfaction that she has helped to save her child from the valley of death.

1 Hershey, L., Moore, A. U., and Richmond, J. B., Science, 1958, 128, 1542.