A CASE OF ENCEPHALITIS CAUSING CEREBRAL PALSY

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During the first half of this century many handicapped children were hidden away in back rooms and only seen by close members of the family. Parents of such children felt shame and remorse and there were many unknown tragedies. Malnutrition, intercurrent disease and even infanticide took their toll. However, with the late forties and early fifties came gradual enlightenment and a more realistic approach. The Press, the child welfare centres and health visitors gradually educated parents to a new attitude which became increasingly aggressive as they demanded more help from the state, which was not at once forthcoming.

Parents and friends became active in local and national groups forming organizations to help handicapped children, which were supported entirely by voluntary subscriptions. Slowly, it was realized that these individuals were in great need of specialized medical and social care and the government provided small grants to various county councils. Many of these children need very little help, some need considerable medical and social help and a few need institutional care. Much remains to be done. This is a growing national problem as paediatric skill saves more child lives but produces more disabled citizens. The case here described illustrates the problem of one family and their general practitioner.

Clinical assessment. Obstetrical history. Mrs F conceived normally three years after marriage. Her pregnancy progressed normally until the fifth month when she developed symptoms of pre-eclamptic toxemia. She was admitted to hospital and with antihypertensive drugs and diuretics the symptoms subsided. After one month she was discharged and was readmitted for induction a week before term. Her labour was normal and the baby delivered after 24 hours. The mother and baby were both well during the puerperium.

Neonatal period. The baby Janice was quite normal for nine months. She was breast fed and gained weight steadily. She was a lively child and reached all her milestones at the expected times.

However, on 29 July 1953, the mother realized that the baby was unwell. She thought at first that she was teething as she was difficult to feed and fretful. For 48 hours baby J remained unwell and had several convulsions, but at that time the parents did not realize their significance. During the next 12 hours there was no improvement and so the general practitioner was called. He immediately recognized the signs of meningism and arranged for the baby to be admitted to hospital.

On admission the child was having a convulsion and was obviously

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seriously ill. She was hyperpyrexial (rectal temperature: 107 deg. F). There was opisthotonos and some neck rigidity. Her chest, cardiovascular system, abdomen and central nervous system were all normal. A lumbar puncture revealed nothing abnormal. Blood culture was negative. White cell count and differential count were not significantly altered. A provisional diagnosis of acute toxic encephalopathy of viral origin was made.

The baby was put to bed and treated with terramycin, streptomycin and penicilllin. The convulsions were successfully controlled by intramuscular paraldehyde. She remained critically ill for 48 hours, but the temperature fell quickly, and the baby then appeared perfectly well and further investigation failed to show any evidence of localized systemic disease.

However, on the fourth day there were signs of weakness of the right side of the body. This was suspected to be due to a lesion in the internal capsule. This was confirmed later and it became clear that intelligence and speech were also affected.

After 11 weeks in hospital, Janice was discharged and several weeks later she started to have epileptiform fits. These were controlled by epanutin, phenobarbitone and, finally, phemitone.

Janice is now 15 years old and since her illness she has been living at home. She is 5 ft. 6 in. tall and weighs 9 st. 4 lbs. She is unable to speak but makes a considerable amount of noise. Janice is very excitable, emotionally labile and warmly affectionate (when meeting her for the first time she flung her arms around me and hugged me). She is always on the move and has periods when she releases all her pent-up physical and emotional energy in and around the house. She is sexually mature, having reached puberty two years ago, and this causes the parents much anxiety as she is morally immature. Her interests are limited to simple jig-saw puzzles and she loves to listen to loud music but her powers of concentration are very limited.

Her paralysis is obvious. The right arm is spastic, atrophied and flexed at the wrist but has some movement at the elbow and shoulder. There is 3/4 in. shortening in the right leg and she walks with an ungainly limp. Her face is normal but spoiled by her frequent grimaces.

**Social.** Mr and Mrs F live in a semi-detached council house. This comprises a living-room, kitchen and small pantry downstairs and three bedrooms and a bathroom and toilet upstairs. In the house live father, mother, Janice and grandmother.

They do not complain of any financial worries. The husband has a secure job with some prospects. He is happy at work and finds his job satisfying. They are able to run a car and buy a few luxuries. They have never found their daughter a financial burden.

Their social life is severely restricted. They watch television each evening and rarely go out. Few people are willing to 'baby sit' for them and Janice is difficult for strangers to manage in her excitable moments. This excitability curtails their visits to relatives and friends but they sometimes go out to the country by car. They feel social outcasts and as a couple they are restricted as they can only go out when Janice is soundly asleep. Even on these occasions they must be back early in case Janice awakens as
grandmother is not big enough physically to manage her.

Despite their difficulties the parents appear happy. The marriage is stable and there are few external stresses. Both are very affectionate and understanding towards the child and are reluctant to have her placed in an institution even though she is an obvious and increasing problem.

The mother is being treated by the general practitioner for hypertension and an anxiety state. The father is the strength of the family being understanding, affectionate and very helpful in managing his daughter.

The grandmother is a woman of small physique but good health and is willing to help when she can. She is very much against the child leaving and feels strongly that the parents must accept and bear their misfortune. There appears to be a considerable amount of family tension created on this point. On the whole the social position is very favourable; there has been no second child to divert the family attention.

**General practitioner’s role.** The main problem for the general practitioner has been the management of the whole family unit and the stresses brought upon it by the environment. For many years he has realized the necessity of relieving the parents of much of their burden but he has been reluctant to press the point concerning the child’s future. He feels strongly that some day the child must be removed from the home to relieve some stress from the ageing parents, but he has to balance this feeling against the parental reluctance to face the issue.

Over the years he has been the king-pin of the medical and social services, visiting the family regularly. The initial diagnosis was made by him and he was instrumental in the prompt admission to hospital of the baby. On her discharge from hospital he controlled the convulsions by increasing her sedation and watched her progress carefully. When further consultation was necessary he referred her to the appropriate specialist, i.e. an orthopaedic surgeon was consulted when her right leg was becoming shorter than her left. When it was necessary for her tonsils to be removed, he arranged for the mother to spend a night in hospital with the child. Over the years he has arranged for her many vaccinations and dealt with any minor ailments. His regular visits allow family problems to be worked out whether they be medical or social. He helped to arrange for Janice to attend the special county schools and arranged transport from door to door. When the parents needed a holiday he found a home willing to accept Janice for two weeks. At present he is exploring the possibility of neurosurgery to control her fits. He is constantly renewing prescriptions for the child and keeping an eye on the mental and physical health of the family.

His main problem is to help the parents to realize the necessity for the child to be nursed properly in a special school with qualified staff present all the time. He feels sincerely that it will be kinder for Janice to become adjusted to institutional life at a fairly young age rather than be projected into it when both parents physically or mentally collapse.

**Conclusion**

There are few people who realize, even today, the problems involved in the total care of a cerebral palsied child living at home. To the parents
it means many sacrifices and to the general practitioner it means much work in integrating the complicated medical and social services.

At 15-years old Janice is physically mature but still mentally a child. She is as demanding as a toddler and for the parents there is little hope of this phase passing. Both parents remain understanding and co-operative but both need to be relieved of some of the burden.

The general practitioner is at the centre of the problem. He has the responsibility of integrating the medical, psychological, therapeutic, socio-economic and rehabilitatory services. The main lines of approach can best be indicated diagrammatically.

![Diagram](image)

This integration of services by the general practitioner has produced a very personal relationship between the doctor, the child and the family. This brings out the best in them all and elevates general practice to a high position in our profession.

It is now becoming clear that maternal physical and psychological stamina are being undermined. The mother is constantly anxious and is unable to allow Janice out of her sight. She worries about the future, realizing the necessity of being relieved of some of the strain as she gets older yet being reluctant to allow the child to go into an institution.

The father is most patient but realizes that his wife's health is being jeopardized but he also does not wish to lose his daughter. Grandmother feels that the burden must be borne by the family. The general practitioner realizes that this is no longer possible and dreads a sudden collapse and rejection of the child.

Thus we can see a complicated cob-web of emotions and loyalties which must be untangled if this problem, and others like it, are to be solved. This can only be accomplished by co-operation between the family and the family doctor.

In looking to the future it seems that this problem of cerebral palsy is going to become greater as paediatricians prolong the lives of children with cerebral damage. These children are becoming the social and general practice problems of the future and the major problem of prompt diagnosis and subsequent domiciliary management still lies with the family doctor.