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THE HOME MANAGEMENT OF THE POLIOMYELITIS RESPIRATOR PATIENT*

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While the number of new cases of severe bulbo-spinal poliomyelitis have decreased since the Salk vaccine, there still will occur a number of cases in the non-immunized group and in addition there are many affected persons remaining from the pre-vaccination period. This report deals with the management of this latter group by myself, as a private physician, during the one year period between July 1956 and June 1957.

There are six patients in the group, five of whom are post poliomyelitis patients and one with progressive dermatomyositis. All but one use some form of respirator aid and this one is a potential user. Their ages range from one year to 36 years. The relatively advanced age points out once again the severity of poliomyelitis in the young adult. Four of the five patients with poliomyelitis residuals are married and they have a total of eight children among them. The average time since the onset of poliomyelitis has been 2.9 years.

Equipment used varies from patient to patient but only one, the dermatomyositis patient, uses a tank respirator. The remaining are sufficiently well ventilated with a Chestpirator or Rocking Bed. In addition, there are slings for feeding where indicated and other such useful adaptive apparatus. In general, the patient and equipment take the better part of a 10 by 15 foot room.

The vital capacities of these people ranged from 8% to 30% of their expected normals. This great decrease in respiratory function makes lung infections their major medical problem. A total of 13 such infections occurred, 10 of which were treated at home while three were severe enough to warrant hospitalization. Home therapy consisted of antibiotics, usually intramuscular penicillin, given by a member of the family, or oral chloromycetin for from 5 to 7 days. Steam, nose drops, and an increased use of the Chestpirator, were also employed. Those using glossopharyngeal breathing[1] as an aid in coughing experienced in general less difficulty in recovering from the infection.[2]

Next in illness importance were those related to the genito-urinary system where calculi made pain and infection commonplace. Three episodes of colicky pyuria of a serious nature were encountered and all needed hospital therapy. One patient with several large calculi subseqently underwent a uretero-lithotomy[3] and is now symptom-free six months later.

When considering the totalness of the patients' disability, the small number of hospital admissions seems to me quite remarkable. Home visits and office consultations were equally low totaling only 20 for the entire six patients.

The purely medical problems are by and large easily handled, but the impact of such an illness on the family as a unit is one which tests the resourcefulness of all

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concerned. Life in the immediate post-acute disease phase has often been relatively easy, being spent in a Respirator Center, where many similar patients are undergoing a program of extensive rehabilitation. Home life following this period can, on the other hand, be extremely trying where the roles of provider and mother are being played alone by the well mate in the married patients. Full-time attendants or housekeepers are used in most of these situations but "outsiders" can never perform and guide the home functions as would the disabled parent.

Activities outside of the home are few because of the immobility of the patient. Two of the six are ambulatory to a degree but truly public appearances are unusual because of self-consciousness. Only one patient, the most severely paralyzed of the group, uses a wheel chair and eats regularly at the table with his family. The effort needed to make this possible is considerable.

Diversion inside the home usually is simple, with reading and television being the principal ones. Gainful employment of some sort is being accomplished by all three adult males. One is working up a sizeable magazine subscription and Christmas card enterprise. Another does part-time accounting at home, while the third composes copy for classical music programs on a local radio station. The teen-aged girl with dermatomyositis is a talented artist, painting with a mouth stick. She graduated from high school in June 1957.

PROGNOSIS

There have been selected patients who have survived up to 20 years with such low vital capacities as the present group, so that the short term outlook for life is good. Death, when it comes, most frequently is a result of respiratory system complications such as bronchopneumonia, lung abscess, and atelectasis. Gastro-intestinal bleeding and acute gastric dilatation are also prominent causes of death. The sequellae of chronic kidney infection rank third as reasons for the patient's demise.[4]

SUMMARY

The medical management in these patients does not differ from that of any chronic disease in that meticulous attention to their many needs and an understanding of their peculiar problems will lead to a definite, comfortable prolongation of life.

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