There is little evidence here that early rupture of the membranes exerts an unfavourable influence upon the child. The foetal head plugs the cervix, and even if the onset of labour is delayed for several days the liquor does not all drain away. In the so-called "dry labour" with slow progress the important factor is uterine inertia, unfavourable presentation, or grave disproportion. In the last two conditions the presenting part may not fit accurately the maternal passages, and the amount of liquor forced down may lead to early rupture of the bag of waters, which is the effect and not the cause of the conditions present. A number of patients in this series were submitted to induction at term, or shortly before, on account of bad obstetric history. In every case the result was most satisfactory. Labour progressed normally and in no single case did the child appear to suffer in any way.

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A NOTE ON ARTIFICIAL PYREXIA IN EPILEPSY

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Many observers have reported improvement in epileptic subjects during the course of an intercurrent febrile illness. Guthrie¹ has reviewed 200 cases of epilepsy where records of convulsions had been noted for stated periods before and following an acute febrile illness: the chief feature of his analysis is the decrease in the number of seizures which occurred during the period of illness. Hamilton² noted a temporary improvement in nine out of eleven epileptics who contracted typhoid fever. Reduction in the incidence of fits during attacks of influenza have been reported by Gordon³ and by Maillard.⁴ These clinical observations find confirmation in the experimental work of Wortis,⁵ who observed that animals having febrile infections are less subject to seizures when given standard amounts of convulsant drugs.

The beneficial effect of intercurrent fevers in epilepsy has suggested the use of malaria as a therapeutic agent in this disorder. Ramsay,⁶ using induced malaria in six chronic epileptics, found a temporary reduction of fits in four cases; he concludes, however, that the induction of pyrexia by this agent is not free from danger. Arias⁷ noted a decrease in the number of fits in eight out of twelve cases treated with malaria. Other authors have reported improvement following the use of protein therapy in epilepsy—Edgeworth⁸ and Steel.⁹

Material Treated

In the present investigation pyrexia was induced over a twenty-day period by intramuscular injections of sulphur in oil, the preparation used being "colsul." The technique adopted was similar to that described by Schroeder¹⁰ in the treatment of general paralysis and dementia praecox. The clinical material consisted of eight institutional cases of essential epilepsy, which were subject to frequent major seizures. The patients treated varied in age from 18 to 58 years, and in all cases

the epileptic habitude was well defined, and some degree of mental deterioration was present. The number of seizures that were present for twenty-day periods before, during, and after fever treatment are shown in the table.

Case No.	Present Age	Number of Seizures		
		During Previous 20 Days	During Pyrexia (20 Days)	During Succeeding 20 Days
1	18	17	4	9
2	19	13	7	30
3	13	23	7	14
4	28	7	4	2
5	58	7	2	10
6	22	72	44	70
7	58	14	8	5
8	32	10	4	9

Results

In this series a reduction in the incidence of fits was found in every patient during the pyrexial period. The majority of seizures occurred when the temperature was falling or in the interval between attacks. In four cases the incidence of fits remained below the average for the twenty-day period following treatment; in three no definite improvement was noted, and in one patient an increase in the number and severity of attacks occurred during this period. With one exception the mental condition was favourably influenced during treatment, a result which can be regarded as of practical importance. Troublesome patients became more amenable, and showed no tendency to quarrel or complain. Fever attacks were well tolerated in all cases, and no unfavourable effects were noted. It has been stated that rest in bed is an important factor in limiting the number of convulsions in chronic epileptics.¹¹ In the present group no significant diminution in the incidence of fits was noted in seven cases, while one patient showed an increase in the number of seizures during a period of twenty days' rest in bed.

Conclusion and Summary

It is not easy to discover why fever should limit the number of fits in epilepsy. The association of certain physico-chemical processes with a reduction in seizures is now generally acknowledged. Chief of these are the establishment of acidosis, of dehydration, and of cerebral vaso-dilatation. It seems reasonable to assume that the value of fever in epilepsy is dependent on the operation of these processes.

To summarize: induction of pyrexia by "colsul" in eight chronic epileptics was accompanied by a temporary decrease in the number of seizures; improvement in the mental condition occurred during the period of fever.

I am indebted to Dr. J. Brander, medical superintendent, Colney Hatch Mental Hospital, for permission to investigate the cases reported in this paper.

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