POLIOMYELITIS AND PROPHYLAXIS

DR. A. TAYLOR-SMITH, B.SC., M.B., CH.B.EDIN.

Whatever it was at one time this is no longer an 'infantile' paralysis. It has come to affect all ages. President Roosevelt fell a victim when in his forties. It is not a new disease. Murals from Egypt are reported showing withered limbs so typical of the end result of this disease. It is said that a skeleton of 3700 B.C. has been found in Egypt showing polio deformities But it did not appear in epidemic form till about the middle of the last century.

Sir Charles Bell in 1836 recorded one of the first outbreaks. This was followed in 1840 by the German Dr. Heine's classical book, and he concluded that the spinal cord was involved rather than the brain. Then Dr. Medin described the various symptoms of rather a large outbreak in Sweden in epidemic form in 1868. He believed it to be an acute infectious fever. Dr. Wickman reported on one of Sweden's worst occurrencies in 1905. He notes that many sufferers, showing fever, headache and painful muscles did not develop paralysis.

An interesting factor came to light on investigating New York's severe epidemic of 1916. No cases occurred among the 350 children living in the slums on Barren Island. In 1908, Karl Landsteiner, a Nobel prize winner for Medicine, demonstrated that it was definitely a spinal cord infection. He was able to transmit the disease to monkeys by inoculating them with a suspension prepared from the spinal cord of a fatal human case. The monkeys all fell victims to paralysis. Dr. Flexner of the Rockefeller Institute found that it could be passed on from monkey to monkey, and that the causative agent was a filterable virus. Intensive research on a world-wide scale is being launched, and it looks as if we might soon know more about the virus than the stricken child.

An odd feature of this dread infection is the fact that it appears to have a predilection for countries of the highest standards of living and sanitation, and where infantile death rates are lowest. It also appears to be rare among the natives of the tropics and sub-tropics. But during, and since the war, the disease has been unusually active, and epidemics have visited the tropics for the first time. In 1941, a large number of victims were found among the Australian and New Zealand forces in the Middle East, while there were almost none among the Egyptian soldiers or people. Malta had its first epidemic in 1942. There were 426 civilian cases with 152 totally recovering, 85 partially and 15 deaths. A feature of this outbreak, according to Dr. Ross was the evidence suggestive of a widespread carrier epidemic spreading rapidly among adults and children, followed a week later by a much smaller epidemic of actual polio cases. The adults escaped while

children under 5 were the chief victims. There were 57 British soldiers affected. The death rate was 19.3 per cent, while the civilian rate worked out to be only 3.5 per cent. Officers were picked out rather than the rank and file.

Dr. Paul, from America, found in 1942 that it was ten times as common amongst the American soldiers in the Middle East as in those who remained behind in the States. Exactly the same thing was found in the Philippines.

South Africa had its first extensive occurrence in 1944-45 since 1918. Mauritius and St. Helena both had severe epidemics in 1945. Sharp outbreaks occurred in Holland in 1943, France 1946, United Kingdom 1947. United States had one of the worst epidemics on record in 1946, and South Africa suffered its worst epidemic yet in 1947.

It is evident that polio is world-wide and is gaining momentum. Feverish research is being carried out on all sides. It is refreshing to find Dr. Theiler, a well-known South African, working at the Rockefeller Foundation, emphasizing, that conclusions drawn from the study of the disease in mice and other animals do not necessarily apply to a related disease in man. Besides the monkey, Dr. Armstrong found that the American cotton rat could be infected with a strain of human polio virus. But also that only a few strains of the human virus can affect animals other than the monkey.

A test for immunity has been developed. Shortly, it consists of mixing the individual's serum with a known amount of polio virus and inoculating the mixture into a susceptible animal. If the serum has no antibody properties the animal develops paralysis.

One result of this test has proved interesting. Surveys in various countries show that all the adults of the tropical backward places are immune. In Europe and America this immunity is only 60 to 80 per cent, and it showed that the tropical native developed immunity at a much earlier age than the European. In unhygienic conditions, exposure to infection occurs at a very early age. This might be at a time when there probably is a considerable degree of passive immunity acquired from the mothers. And this might account for the fact that although the infection would almost certainly be more widespread among primitive people, serious effects of polio are rare.

Then a most important factor and one generally overlooked is the question of 'fear'. One would expect this to be more in evidence in the highly civilized and highly strung peoples of America and Europe. The fear of this disease not only lowers individual morale but tends to cause a degree of panic in the community. Fear may be one reason for the higher age groups being more and more involved and where the fatality rate is highest. And even on recovery, with paralysis to be overcome, there must be a greater sense of inferiority to be faced than in the small child.

But even among the highly developed people most cases are non-paralytic. One of the vital aims of research is to find how to prevent the dreaded paralytic form developing. And thus intensive efforts are being made

to develop an effective vaccine. It is in the direction that protection is sought—just as happened in the case of smallpox and yellow fever. There is no question but that this is *one* method of protection and fairly successful. That there are other ways cannot be doubted, and one is supplied by Homoeopathy. This would have the outstanding property of being entirely safe and, therefore, an advantage over vaccine. Prevention is the great forte of Homoeopathy and only when this crippling and dreaded disease can be entirely prevented should medicine be satisfied.

Like all diseases and especially those due to a virus or micro-organism a person can only fall a victim if he is susceptible. He must be in a more or less sensitized or allergic condition to react. The aim is to be able to de-sensitize the individual. The more specifically this can be done the less need for communal preventative measures like isolation—control of carriers and control of contacts, etc.

The impression, however, is gained that polio is not a contagious disease in the sense that smallpox is. It is rather difficult to think of it as being so infectious. Of course, the fact that it can be epidemic naturally forces its classification as infectious. But it is a most frequent thing to find that only one of a large family of children falls a victim, or that one only has been picked out of a large school class.

In this connection it would be difficult to account for a case we had at the Royal London Homoeopathic Hospital. This was a lad of 18, born on the Falkland Islands. He was a member of an expedition to the South Pole. After being away in the Antarctic some 8 months, he suddenly developed an acute attack of polio. He was flown back to London, and on arrival we found both legs paralysed. It would not seem idle to ask if it could not have been due to sensitivity to some foodstuff.

There is urgent demand for a prophylactic agent, and vast sums of money are being collected to further this quest. Science is put on its mettle to find a vaccine.

There are many and varied views as to the control of contacts—but it is not so much the contact as the carrier we have to fear. Hence there would appear to be less value than is thought in closing schools, swimming baths, cinemas, etc. In fact the justification of this has been queried by medical officers of health. But pasteurization of milk and the control of flies have been strongly urged. All this, of course, pertains to the virus, but what of the 'soil'?

Active carriers seem to be effective for 10 days or more after exposure. There apparently are no chronic carriers as in diphtheria. Cases are thought to be especially infective in the preparalytic stage. Failure to infect the attending nurses and doctors points to the suggestion that cases of disease soon lose their infectivity.

It is generally recognized that the raising of constitutional resistance is all important, and factors tending to lower it are, therefore, avoided; like

fatigue, chill, operation, etc. Such will perhaps precipitate a border-line case, but cannot have much effect on the majority.

When the word 'constitution' is introduced, thought is immediately directed to the homocopathic school. There is difficulty, however, in spotting the constitutional remedy in a child obviously 'sickening for something'. This so often overshadows all the background for the moment. One is thus driven to think of a remedy that could be used, perhaps, as a *routine* for prevention. This, of course, cuts across individualizing the case. But the same thing applies when use is made of Belladonna for scarlet fever prophylaxis, Ledum and Hypericum for tetanus, Caulophyllum for disorders of pregnancy, Nat. mur. for malaria, and so on.

Active immunity appears to develop very rapidly. So many manage to do this spontaneously that it rather suggests that the individual can protect himself with very little outside help.

As a prophylatic 'epidemic remedy', which incidently anticipates to a great extent, the paralytic phase as well, one of the following has been recommended: Belladonna, Gelsemium, Physostigma. My experience suggests that Lathyrus should be added to the list. There are many more that could be used for the later stage when some degree of paralysis has already set in, but at the moment we are limiting our thoughts to the early stage.

EARLY CLINICAL PICTURE

The onset can be most insidious or apparently instantaneous. A child may fall paralysed while at play. It is well known how great the variations are in the clinical features, varying as they do from a mild coryza to a rapid paralysis. Usually the early picture shows some depression, malaise, diarrhoea, sore throat, headache, vomiting, pain in the limbs and often tenderness. On flexing the neck there often is some degree of stiffness or tendency of displacement of the umbilicus. Inability to kiss the knee is a popular test. Reflexes are too variable to list, but there always appears to be a high temperature, 102 and over. Often the first sign of respiratory failure is the inability to take a deep breath.

SIMILARITY TO INFLUENZA

At the onset there is a remarkable likeness to influenza, and, in fact, it is only in times of an actual epidemic that one is compelled to suspect polio. The usual initial features, let me repeat, are: high temperature, malaise and general weakness, headache, drowsy, tongue furred, flushed face often, tender limbs, apprehensive, coryza often, nausea, vomiting and diarrhoea often. Eupat. per. looks like the very similimum at this stage, and one wonders if we have not an effective prophylactic in this remedy.

D.D.T. The use of this poison is becoming so prevalent that it might be of interest to report the following: Using a 10 per cent solution against fly and mosquito I accidentally poisoned about 120 fowls. All died except 9—every one of which was left with some residual paralysis of limbs. Before

realizing what the actual cause of this 'epidemic' was, two veterinary surgeons were called in. Both, though unable to diagnose the trouble, agreed that the feature suggested a very close resemblance to polio.. My own diagnosis was anterior poliomyelitis. This raises the question as to whether there is not perhaps a better 'remedy' yet in D.D.T. A proving would be most interesting.

It is very probable that flies will 'mutate' in time to become more or less resistant to D.D.T. This has, I believe, already happened in Italy and in parts of South Africa. It is not perhaps too wild to speculate that such a strain of fly might act as a 'carrier' and pass on a D.D.T. sensitizing effect to humans via contamination of food. That is to establish a sensitivity to the polio virus.

Lathyrus. There are over 100 varieties of this plant. There is not a great deal of information available from a medicinal point of view about this plant. I quote from 'Clarke' and an Arabic Materia Medica by Ar-Rashecdi. Clarke describes two varieties of Lathyrus—sativus and cicera, both Chick peas. Both have produced poisoning. Our garden sweet pea is Lathyrus odoratus. Both, except for their brownish colour, could be mistaken for ordinary peas. Sativus has bluish flowers and cicera red. Both are cultivated for food and sometimes cut as green fodder. Accidental poisonings have most commonly happened in famine seasons. It is usual to make up flour deficiency with these peas.

L'Art Medical of August, 1882, quotes an article on Lathyrus as observed in Algiers. In times of bad harvest it is customary to mix flour of the Lathyrus seed with wheat flour in the proportion of 3 to 1 to make bread. The effects of eating this produces very frequently a disease well known to the Algerians. The symptoms are: (1) Lumbago, incontinence of urine, loss of sexual power, pains in lower and sometimes in upper limbs. The onset is sudden and often comes on after a damp cold night. (2) Lower limbs become affected with anaesthesia and motor paralysis. A point of great interest is that this disease is called 'jilben' from the Arabic name, not only of the plant, but also of polio.

Clarke especially says that Lathyrus will doubtless prove a notable remedy in spinal complaints and that men are more susceptible to it than women. Both of these points are well illustrated in polio itself. The Arabic book says the cicera variety is grown in some provinces of France. Dr. Diberuache proved that the flour of these peas would be harmful if mixed with wheat flour to make bread. Then Dr. Duvernier produced a thesis showing that this variety is poisonous and may produce a pseudo-paresis. It goes on to say that Lath. sativus has practically the same properties but that the seeds are more square. These are eaten dry in Southern France where it grows.

Here is a different version to Clarke, who says that it is the cicera seeds that are more square—which is correct I do not know.

My thanks are due to Dr. Yusef D. Zablith who kindly furnished me with the following, culled from *The Universal Herbal or Botanical and Medical and Argicultural Dictionary* by Thomas Green, 1824, Vol. II.

Lathyrus cicera. Flat podded Lath. or Dwarf Lath.

Lathyrus sativus. Common Lathyrus, or Blue Chickling Vetch.

Peduncles one—flowered; tendrils two- or four-leaved; legumes ovate, compressed, two-edged at the back. The same habit as the preceding. Flower twice as large, generally white, sometimes tinged with purple or having a rose-coloured standard, or blue, or blue and white variegated in its native countries, but in our gardens it is distinguished by the blue colour of the corolla, though we sometimes have a milk-white variety. The seed pods afford a more certain mark of distinction, being usually short, broad and winged on the back. In several parts of the continent, a white, light, pleasant bread is made from the flour of this pulse, but it produced such dreadful effects that the Dukes of Wurtemburg forbade the use of it by edict in 1671, 1705 and 1714. Mixed with wheat flour in half the quantity, it makes very good bread, that appears to be harmless, but the bread made of this flour only has brought on a most surprising rigidity of the limbs in those who have used it for a long time; in so much that the extensor muscles could not by any means be reduced or have their natural action restored. These symptoms usually appear suddenly, without any previous pain, but sometimes they were preceded by a weakness and disagreeable sensation about the knees. Baths, both hot and cold, fomentations and ointments of various kinds have been tried without effect, in so much that it is regarded as ineurable, and being neither very painful or fatal, those who were seized with it usually submitted to it with patience.

Swine fattened with the meal lost the use of their limbs, but grew very fat, lying upon the ground. A horse fed some months on the dried herb was said to have his legs perfectly rigid. Cows are reported to grow lean on it, but sheep not to be affected. Pigeons, especially if young, lose the power of walking by feeding on the seed. Poultry will not readily touch it, but geese eat it without any apparent detriment; and it is commonly sown in Switzerland for horses, and the cattle there feed on the herb without any harm. It would be well worth the trouble of ascertaining whether the noxious qualities of this plant do not greatly, if not entirely, depend upon the soil in which it is cultivated, for it has been already observed, that the seed is much more deleterious from a strong, fat, moist soil than from dry lands. The Florentine peasants eat it boiled or mixed with wheat flour, in the quantity of one fourth, without receiving any harm. In the countries where it is cultivated, the seeds are sown at the end of August, or the beginning of September, or in the spring, in the strong ground; for in a light, dry soil the roots are very weak and it is apt to be destroyed by spring frosts.

Anne Pratt confirms all this in her book—"In several parts of the Continent a white and well-flavoured bread is made from the seeds of Lath.

sat. In the seventeenth century when this bread came into general use very sad effects followed the eating of it as a daily food. A great rigidity of the limbs ensued, causing a loss of muscular power beyond the reach of cure. No pain served as a premonitory symptom. The sufferer experienced little more than a slight diminution of strength, when he suddenly found his limbs rigid and movement impossible. Several of the lower animals were found, when fed on this diet to lose all use of their limbs, and even pigeons, which ate the seeds, shortly became unable to walk, though geese could eat them with impunity.

In 1671, an edict stopped the use of this bread in Wurtemburg, but the peasants still continued to eat it, till Leopold, in 1705 and 1714, prohibited its use. A variety of Lath. sat. called the poisonous pea of Barbary, is highly deleterious. The government of Florence forbade the use of the seeds in bread in 1786, but Fabroni says they are still used by the poor—boiled and mixed with wheaten flour and thus prepared, they do not seem to have any bad effects.

This is probably the result of good farming methods."

Sorsby writes in his *Medicine and Mankind*: "Lathyrism is not unknown in Europe and seen with appalling frequency in areas ravished by famine and drought. The Lath. pea, on which the population of such areas feed, contains a poison producing paralysis. In 1922, some 60,000 people were affected in Nepal, India."

Lath. sat. is the lentil of Spain.

Baron Ferd von Mueller tells us that there are at least three active principles to be found in Lath. sat.:

(i) Cytisin.

(ii) Catbartin.

(iii) Gentiarin.

There is very little information available about them. They appear to be alkaloids. The first is found in Laburnum and can produce paralysis, and the second in senna. Its production is very abundant, and the culture not being expensive, is very general in some parts.

A very promising and useful line for research is suggested by the fact that the toxic properties of this pea seem to depend on the soil it is grown on. Could answers be found to the questions of, "Why this is so?" "And is it possible to affect our ordinary foodstuffs in the same way, or at least, to the degree of affecting those that have a sensitivity?" As the state of the soil controls the degree of toxicity it is likely that a point must be reached where toxicity is so low as to produce an immunizing effect. Hence it is possible that a high resistance to polio could be built up by eating Lathyrus from such soils. Lathyrus is a vetch and is a popular fodder plant for cattle. So one wonders if, when grown on unsuitable soil, unsuspected by the farmer, it could not be possible for some degree of contaminating milk or beef. Especially among the more civilized people Lathyrus in this way might cause

sensitization to the polio virus. The peculiar receptive capacity of the individual could thus be conditioned to respond, and this would, of course, vary from individual to individual.

It may be able to withstand the processes of tinning or processing. Thus the feeling cannot be avoided that the highly suggestive evidence of Lathyrus sativus puts the universally popular soup made from pea flour under some suspicion. We are accustomed to accept products commerce offers, without a query as to purity. In fact, we tend to take it for granted that nearly everything is adulterated in some way or other. This probably is deliberate in the vast majority of cases. But it is possible that in some instances this can happen quite unsuspectingly. It is doubtful whether bulk wheat flour, for example, can escape being contaminated with some ergot (or smut, as the farmer calls it). And so bread can't avoid falling under suspicion as a factor behind many of our cardiovascular troubles, like Raynaud's or Buerger's diseases, etc. Lathyrus sat. pea flour would probably be so cheap that industry could hardly resist using it to dilute ordinary pea flour.

There may be a dozen or more agents that could cause sensitization to pave the way for polio. But it looks extremely likely that Lathyrus is one of these agents. The idea of prophylaxis would then be one of desensitization by potentized Lathyrus and so rendering the 'soil' immune to the onslaught of the virus.

It strikes me that it was a matter of very good fortune that our potentized remedy must have obviously been made from a poison conditioned plant, i.e. one that happened to have been grown on unsuitable soil.

LATHYRUS AS A PROPHYLACTIC

Two groups were dealt with:

1. The healthy; 82 cases.
2. The sickening; 34 cases.

The first group: Lathyrus sat. was given purely as a prophylactic measure. At the time of administration all in this group were apparently quite healthy. Each was given Lath. sat. 30—one dose and a repeat in 16 days. As there was a rather fierce epidemic at the time and with no information available as to the effective duration of Lath. sat., I thought it wise to give this 16 days repeat.

The group included: 42 white children, 21 coloured children, 19 white adults.

The ages of the children varied from 6 months to 20 years. All degrees of social strata were represented, from the rich to the slums. Every one in this group lived in close proximity to a very suspect area. In fact, many were either next door to, or closely surrounded by proved positive cases.

Actually 12 children were exposed to infection by direct contact. They were playing with cases that had been removed to hospital where they were later proved positive. Contact varied from 1 to 4 days previously.

Not a single one in this group developed polio.

It is most interesting, however, to report 4 cases of a proving of Lath. sat. This is not the place to debate on whether they were cases of 'aggravation' or 'proving'. It is usual to accept any sub-lumal symptoms, i.e. not evidence clinically, that may be produced by administration of a remedy as a proving. Where these symptoms can be detected, no matter how delicately, then it might be called an aggravation. But it surely still remains a 'proving'. Thus it strikes me that the use of the word 'aggravation' serves little purpose. It does not mean much more than saying Case A is a little more allergic than Case B—or that as a result of greater time and care spent on these cases some symptoms at first overlooked were eventually discovered in Case A but not in B. A would then be said to exhibit an aggravation while B showed a proving. Really, are they not both 'provings'?

As these 4 cases developed from the 'healthy' group, we will quarrel with no one in calling them 'provings'.

PROVINGS

I. These were girls in one family, aged 1½, 3½, and 6 years, and it is interesting to find that their symptoms were more or less all alike. Within 2 hours of getting the prophylactic dose of Lath. sat. all three children began to show symptoms of a proving. I found that they all had urgency of micturition. They complained of malaise and were apprehensive. All of them had headaches with giddiness, especially the eldest. They all had diarrhoea and muscle tenderness. None had any temperature.

The eldest child was distinctly more affected than the other two and it was not until the third morning that she showed total recovery. The younger two were quite well the next morning.

Sac. lac. iii—2 hourly was given.

II. This was a family of three boys and a baby girl. Their ages were 3, 4½, and 9 years and the girl was 5 months.

It is curious that they showed rather a delayed action, although the mother thought they were a little off colour. It was only on the morning of the second day that they developed 'weakness'. It is curious too, that only the two eldest appeared allergic enough to show symptoms and quite different to those of the first family. In this instance they did not want to get out of bed. One complained of a sore throat and had vomited three times. Both were sleepy. They said their legs felt heavy. Again there was no temperature.

Sac. lac. iii—2 hourly was given.

They were quite well again the next morning.

III. This was an only child, a boy of 4. He gave rise to considerable anxiety, and the parents were difficult. He was seen early on the morning of the second day. He looked sick. There was distinct neck stiffness and he resented handling. He had vomiting and diarrhoea. He kept complaining

of 'sore legs'. This case shot a temperature and it was 103 when he was given, with considerable trepidation, the usual Sac. lac. iii—2 hourly.

He was sitting out in the garden next morning eating oranges and was quite well.

IV. This was a case of an adult. A married woman of 28 para. 3, thin and rather active and a heavy smoker. Here again, the reaction appeared to be delayed. It was not until the morning of the third day that she gave the following symptoms: Urgency of micturition—occipital headache—stiff and tender muscles all over, but especially calves. She was depressed. She had the tingling and numbness of the tongue and lips that are typical of Lathyrus. There was no temperature but her pulse was over 100.

Sac. lac. iii—2 hourly was given.

She took 5 days to recover completely—probably because she struggled to continue working, and incidentally, some risk may have been run in adding 'fatigue' to the story, as there is evidence that this is a real factor in producing paralysis.

The Second Group, i.e. the sickening: Each was given Lath. sat. 30 ii—1 hourly and ii—3 hourly.

The remedy here was emerging from a purely prophylactic to a therapeutic one at a very early stage of the disease. It must be remembered that everyone in this group, though sickening, may not all have been heading for polio. Only the fact that an epidemic was raging justified this assumption, and they naturally had to be treated as such.

The second group consisted of: 18 white children, 16 coloured children.

Everyone showed one or more actual symptoms, i.e. all of them showed some degree of sickening. These symptoms varied a great deal and in all but a few were very slight. All these cases were considered quite mild except for six white and three coloured. These nine cases showed varying degrees of muscle tenderness and neck rigidity and all had temperatures over 100. After being given Lath. sat. 30 iii—½ hourly and iii—2 hourly five cases were isolated and nursed at home, but three white and one coloured were sent on to hospital as likely to prove positive after Lath. sat. 30 iii—½ hourly.

The most serious of this group was a girl of 2½. The mother was leaving for a maternity home the next day. I saw her about 9 p.m. in consultation with the family doctor. She seemed to have most of the usual recognized early symptoms and she had neck stiffness and distinctly resented being touched anywhere. We both considered that this was a grave case and that it needed hospitalization—which was arranged for the next morning. She had Lath. sat. 30 ii—½ hourly and then fell asleep. The doctor left with the words: "Well, we will know in the morning." He did. It was negative.

Here was a case a little beyond 'sickening'—although the mother said she fell sick only about 6 p.m., i.e. about 3 hours previous to the consultation.

There is room, of course, for the query to arise whether Lath. can be given all the credit in this case. Personally I am inclined to do so because it is common experience to find that if a child falls into a sound sleep following any remedy that it is out of the wood.

TWO LATE CASES

For the sake of completeness two developed cases are reported where paralysis had already occurred. I do not think if profitable to go into a great deal of detail with them because the paper is intended to discuss the problem in its earliest stages.

These two cases, however, were the only ones seen at the paralysed stage. They were not my cases. I saw them in response to a call for help from the relatives.

Better remedies might have been employed but I was particularly anxious in studying Lath. sat. and this was given in both cases.

The first was a coloured boy of 6, isolated but nursed at his home. His mother was fairly intelligent and obeying suggestion in the lay press she kept the boy in bed from the second day. I saw him on the eleventh day late at night. He seemed to have had a mild onset and the mother thought he was quite well again the day before the paralysis set in. This was the second day of what I thought a moderate degree of paralysis—chiefly affecting all the muscles of the right lower leg. He seemed perfectly fit and well otherwise. There was little tenderness and no temperature. I told the mother that I thought he was already on the mend and that the probability was he would make a rapid and complete recovery. Though Lath. sat. 30 iii—3 hourly was given this boy may quite easily have had a rapid spontaneous recovery.

The second case was a much sadder affair, and I only saw her in the last stages. She was a young white mother of 20, and well-built. She had never been ill in her life. The baby was 18 months old. History of sudden onset with rapid development of paralysis. She was in a respirator and it was the eighth day. Paralysis of lower limbs, trunk and diaphragm. As often found in the ascending type of adult paralysis it proved rapid and progressive and fatal. Lath. sat. was given, iv every 10 minutes—½ hourly and ii—2 hourly without avail.

Up to now no reference could be discovered as to the actual use of Lathyrus in polio. It is gratifying to find Dr. Grimmer's views expressed in a recent *Homoeopathic Recorder*. He is one of the leading U.S.A. homoeopathic physicians. "In the field" he says, "of prophylaxis, the epidemic remedy when it is found gives the best protection. In forty years of practice I have found Lathyrus sat. one hundred per cent effective." My own experience confirms this.

POSTSCRIPT, OCTOBER, 1949

Nothing definite can be based on one case, of course, but the following

event is suggestive. The inference is that full protection by Lathyrus seems doubtful after one year. It is customary to accept a time factor in all prophylactic measures so this is nothing unusual.

This report comes from the mother on my 15 month follow-up, and all the rest are negative. Her daughter was one from the healthy group to be immunized by Lathyrus and developed trouble almost exactly a year later. She was a little girl of four. She fell ill with symptoms suggestive of influenza, viz. vomiting, sore throat, headache and a temperature of 102°. Next day she complained of sore feet, when she was confined to bed. On the fourth day she was sent into hospital and tests gave a positive polio. Nothing further developed and she was discharged on the 29th day as a very mild case of polio.

DISCUSSION

The President thanked Dr. Fraser Kerr for reading such an interesting paper on a topical subject. This was the first discussion the Faculty had had on this disease and she hoped members would give their experiences.

Dr. W. Lees Templeton said that he had not seen any cases in the recent epidemic and he hoped those who had would give details and the results of treatment given.

Dr. Taylor-Smith had been in the midst of a large epidemic and had given details of over 100 cases and was, therefore, entitled to be dogmatic. The figures he offered on prophylaxis were very impressive, not a single case developed the disease. It was not absolutely certain that it was due to his precautions, but the results were very impressive. Although the choice of a single remedy might be brought up as an argument against Homoeopathy that was not so, for even in ordinary 'flu epidemics one often talked about the remedy for the epidemic, in other words, there was one drug which seemed to cover most of the cases.

One was interested in the suggestion that D.D.T. produced poliomyelitis in chickens. Mr. Tucker had mentioned, apropos of the new substance "E", the evidence that formaldehyde injected into joints produced rheumatoid arthritis and suggested that homoeopaths should seriously consider proving this. On the question of the contamination of food he still had a strong feeling that half the present-day fatigue was due to the added calcium in the bread. Why *should* people be so fatigued? He thonght something should be done about it.

Dr. Taylor-Smith drew attention to the fact that there were all sorts of contamination in food, some of which were accidental, but calcium in the bread was not and it was something which should be studied.

Even if members had not had any recent cases of poliomyelitis some of them may have treated mild cases without knowing it. The fact that 50 to 80 per cent. of the population were known to give a positive test showed that they must have had the infection in childhood or early adult life. He could recollect a number of cases where the patient had a meningeal headache with

the suggestion of a stiff neck and that was the type of case who, if treated according to the indicated remedy at the time had cleared up or been aborted. According to the pathology the disease was supposed to start in the nasopharynx and spread to the brain stem and that was when one saw the cases with a meningeal type of headache and a temperature. This was the stage where the disease could he aborted. Any treatment given after the stage of paralysis probably did not do very much. Recovery was often due to the fact that the damage done was minimal. The stage where one wanted to catch it was at the first stage and then the symptoms could be matched by a drug.

Dr. Taylor-Smith's own description of the early stages was exactly like the symptoms of influenza which made the speaker suggest that the word "influenza" should not be used so loosely. There should be some criteria for influenza because possibly poliomyelitis cases were being missed by being called influenza. The picture was often that of Gelsemium which he felt was likely to be a most useful remedy *if given early*.

Dr. Taylor-Smith's figures were very impressive, there he was in the midst of a severe epidemic and none of the cases to which he gave his drug contracted the disease, but the picture regarding treatment was a little less impressive. One had the feeling that they might have been mild cases, and the same remark applied to his provings. When a result of proving was obtained two hours afterwards he was a little sceptical, he did not get any results in less than a month in his own provings. On several occasions within the last two years at the end of four weeks he had wondered whether it was worth while going on and then something came along, so he was a little sceptical of Dr. Taylor-Smith's 30 giving a proving in two hours.

He would, however, congratulate Dr. Taylor-Smith on his very bold action in the midst of a very serious epidemic.

Dr. W. R. McCrae also wished to send his congratulations to Dr. Taylor-Smith. His contribution to Homoeopathy in this paper was very important. Lathyrus was a very interesting remedy. It came into a group where there were many medicines (the 5th group). He would urge Dr. Taylor-Smith in his study of Lathyrus to search out some of the uncommon symptoms to guide his fellows in their selection of it. He stressed one particular symptom when he said that a child had an increase of pain in his feet when he went to bed, which was quite significant. This was a useful symptom and certainly worth confirming. It was a nervous remedy. The nerve symptoms or the mental symptoms of an essentially nervous disease were not nearly so important as the physical symptoms as a guide towards treatment and perhaps Dr. Taylor-Smith would search successfully amongst the physical symptoms for the leading indications.

Dr. Foubister also congratulated Dr. Taylor-Smith. He said there were two points he would like to mention. One was that Dr. Taylor-Smith tried to find out how long the prophylactic effects of Lathyrus lasted. It was one of the weaknesses of homoeopathic prophylaxis that we had no exact knowledge as

to the length of time a patient might be protected after taking a prophylaetic remedy. The other point was, Dr. Taylor-Smith noted that it was in civilized countries that poliomyelitis was most prevalent. It was also in these countries that immunization against acute illnesses such as diphtheria was extensively carried out. Two doctors who saw a great many children, working independently, had mentioned to him that they had an impression that there was some relationship between diphtheria immunization and severe poliomyelitis in the present epidemic. Dr. Foubister said that in the out-patients department they were having more cases who had not been well since immunization against diphtheria.

Dr. Newell reported a case with mental symptoms more marked than the physical. The patient, a susceptible and highly sensitive teacher, went to Germany, contacted someone with a very bad cold and had a premonition she would get poliomyelitis. She returned to her teaching, developed a cold with sore throat and very severe sneezing and a central frontal headache. Kali bichrom. was given—jerks were then normal. Three weeks later she came feeling shaky and very tired from the waist down, stiffness of the shoulder and inability to concentrate. Rhus tox. was given and later Kali phos. A surgeon diagnosed an abortive attack of poliomyelitis. She later complained of a succession of fleeting weaknesses, the most marked being in the left hand. This latter cleared very quickly with Causticum 30. Unfortunately she repeated the Causticum without my permission and had a very severe depression indeed and prolonged exhaustion, for which Picric acid was given. She is steadily progressing.

Dr. A. Benjamin said that the symptoms suggested myasthenia gravis and if there were no very outstanding constitutional remedy indicated he would suggest trying Curare, it was a valuable remedy in that sort of case.

Dr. Kathleen Priestman said that few members seemed to have seen many cases and she could not say that she had seen definite cases. She had one child of about 7 years old in the epidemic two years ago who seemed to have the early symptoms, headache, stiffness of neck, general aching and tenderness of limbs and complained of difficulty in breathing with a temperature of 102°F. She was thirstless and on those symptoms she was given Gelsemium with very quick results. The symptoms disappeared and she never developed paralysis.

It seemed to her that at present they would have to develop all their statistics out of the one or two cases which each of them had. Gelsemium was one of the remedies for antieipation and she had met quite a considerable amount of nervousness amongst parents with children and she had got so far as to give Gelsemium 30, claiming nothing, as a prophylactic in cases where there had been contacts and so far no case that had had Gelsemium had developed polio, but it was far too early to say anything definite beyond the fact that she thought that Gelsemium covered the very early symptoms of

the disease. Its characteristic symptoms were the intense headache, backache and pains, and even paralysis of muscles.

Mr. L. G. Scoular said that he was friendly with a medical officer in charge of a large isolation hospital and in a talk with him about this disease he said that it was his strong belief that anterior poliomyelitis was much commoner than one supposed. Many cases of raised temperature of unknown origin were probably due to this condition.

He wanted to ask what tests were employed to prove or disprove whether a person had had the disease, and whether the test was applicable to patients with so-called influenza.

Sir John Weir said that he had not seen an acute case but had been consulted at the later stage. One was a young man of 18½ years of age, who was found unconscious in the street and taken to hospital where they could not make a diagnosis, to the annoyance of the parents. Ultimately infantile paralysis declared itself. The difficulty of diagnosis at that time, especially in the Malta epidemic, was discussed in the *British Medical Journal*.

When the patient was seen five months after onset the symptoms suggested Physostigma. A single dose of the 30th potency was given, and within a week the surgeon was delighted with progress. In two months he was able to go shooting, but two months later he seemed to be slowing down again and was given Physostigma 200, single dose. A month later it was difficult to detect any difference in the legs. A year later, when he seemed to tire too readily, he got another dose of Physostigma 10M. When seen three years afterwards he reported that he had been perfectly well.

Another case contracted the disease in the desert, 1944, when serving in the Army, the right leg and arm being chiefly affected. Sir John saw him in January, 1947, and gave Physostigma 200, one dose, and in a month he could walk 12 miles very well. This remedy was repeated four months later when he began to feel slack. In April, 1948, a third dose of Physostigma 200 was given. In November, 1949, he reported that he had been very well and farming for 18 months.

In August, 1947, a woman, aet. 43, who, after sea bathing with her children developed a temperature of 102°, was thought at the time to be suffering from ptomaine poisoning. She lost the use of the right arm, there was pain in the neck and shoulder, and she had sciatica in both legs. The right leg was weak. She developed an inability to cough or swallow, and choked when she attempted to eat. She saw a nerve specialist two months after the onset, and he said that she had degenerative changes in the right deltoid, supra- and infra-spinatus, and slightly in the triceps. There was a unilateral paralysis of the palate on the right side, a complete paralysis of the supra- and infra-spinatus, and almost complete paralysis of the deltoid on the right side. There was a little weakness of the left arm. He thought that external rotation of the shoulder would always be weak, but that she would recover good elevation of the arm. First of all Curare 30, one dose,

was given in October, 1947, and she had three doses of the 200th potency between October and December, 1947. Whilst this did help, progress was slow, so on the 29th December, 1947, she had Lathyrus 30, a single dose, after which she went ahead. She improved a great deal, could swallow, eat, drink and even laugh, without much difficulty, and was able to raise her right arm. Lathyrus was repeated in the 200th potency in January and March, 1948, then the 10M potency in April and July, 1948. It was now felt that her own constitutional remedy should be tried, so she had Calc. carb. 200 on July 16th, 1948, repeated in the 500th in September and November, and raised to the 10M in February, 1949, since when she has been doing almost whatever she wanted, even to playing golf. There is still a very slight difficulty with swallowing, but otherwise she is well.

Sir John Weir has listed the following details which he has found useful in differentiating the medicine which he quoted.

Lathyrus sativus (Chick-pea)

Affects the lateral and anterior columns of the cord.
Reflexes always increased.
Paralytic affections of lower extremities.
Spastic paralysis.
Infantile paralysis.
Spastic gait.
Cramp legs.

Curare (Arrow-poison)

Muscular paralysis without impairing sensation and consciousness.
Paralysis of respiratory muscles.
Arms weak and heavy.
Legs tremble.
Reflexes lessened or abolished.
Produces paralysis of right deltoid.

Physostigma (Calabar bean)

Spinal irritation, loss of motility, prostration.
Rigidity of muscles, paralysis.
Depresses the motor and reflex activity of the cord, and causes loss of sensibility to pain, muscular weakness, followed by complete paralysis, although muscular contractility is not impaired.
Poliomyelitis anterior.
Crampy pains in limbs.
Great prostration of muscular system.

The President said that they would all send their congratulations to Dr. Taylor-Smith.

—*The British Homoeopathic Journal*, April 1950