

"mitis," but laryngeal obstruction occurred three to four times more often in the "mitis" group. We do not know how many of these 181 victims would have been saved by an early diagnosis of diphtheria and the instant injection of 2 or 3 c.cm. of modern "refined" or enzyme-treated antitoxin (which has a very small tendency to cause "serum reaction"), but it is safe to suggest that many would have been saved.

It is a fascinating epidemiological problem that strains behave somewhat differently in different areas—thus "intermedius" has often been the most virulent of the three types in Liverpool and several other areas. "Mitis" in the small collection of 310 American cases caused a death rate of 8.1%. M. Frobisher,<sup>2</sup> writing from Baltimore, finds the strict determination of the types so often in disaccord with their effect on the patient that he speaks of an unfortunate confusion between clinical and bacteriological terminology, and favours the application of Roman numerals to the half-dozen or more serological groups that the laboratory worker is able to make in McLeod's three groups. McLeod,<sup>1</sup> after a survey of the world literature available at the middle of 1942 and discussion of the serological subgroups within his main three groups, considers that the three groups "gravis," "intermedius," and "mitis" comprise all the cultures yet identified—except "a small percentage of strains." Whether further research in different parts of the world increases this small percentage to a larger one or not, the terms introduced by the Leeds workers are probably near enough to the truth to have come to stay. An interesting feature of the whole problem is that, though diphtheria antitoxin in use in the whole world was made almost entirely for many years from the descendants of one culture, Parke 8, generally considered to be an "intermedius" variety, the brilliant success in immediate stoppages of outbreaks of diphtheria by the injection of this antitoxin was virtually unbroken, though widely separated epidemics must have been caused by many different bacillary types. Further, it is virtually true that the nursing staff in diphtheria wards can be kept entirely free from attacks of diphtheria by immunization with prophylactic made from this same Parke 8 intermedius strain, though they must repeatedly be exposed to infection by all types when nursing.

### THE KENNY METHOD CRITICIZED

Under the title "Fact and Fancy in Poliomyelitis" there appeared in the *Journal* of July 31, 1943, a critical review of a book by Pohl and Kenny in which the latter's methods of treatment in acute poliomyelitis, and the hypothesis by which the method was sought to be rationalized, were fully discussed. The "new concept" of the disease proposed that the well-known lesions in the motor nerve cells of the ventral horns of the cord were irrelevant, and that true paralysis from destruction of nerve cells was exceptional and unimportant, but that the residual symptoms were due to shortening and wasting of inflamed muscles which had not been properly treated in the initial stage of the illness. The essential lesion of the disease is, according to this concept, an inflammatory condition of muscles leading to spasm, pain, temporary "mental alienation" of muscles, and incoordination. All this is curable by the Kenny method of hot packs and re-education exercises initiated at the earliest possible moment after diagnosis, and the permanent disabilities with which we are all so familiar are due solely to the neglect to combat the muscular inflammation by the Kenny procedures. In short, we have never treated the malady properly because we did not recognize

its true nature. It was easy to expose the fantastic nature of the new concept, and in a recent article J. A. Key<sup>1</sup> provides the necessary criticism of the method. He states that all the cases of so-called cure obtained by the Kenny method that have come under his observation have been those of patients who were never paralysed but belonged to the abortive or non-paralysed group that bulks so large in every epidemic. In claiming 80% of cures for her method Sister Kenny, he says, has omitted to point out that she includes cases of this category, if indeed she recognizes it. In addition she contrasts this figure of cures with the 12% of cures recorded by McCarroll, whose cases came under observation and were treated only because they were in fact already paralysed. Key deprecates the use of broadcast and of lay press to advertise claims of this order.

In a detailed comparison of orthodox and Sister Kenny's methods of treatment Key states that the latter tend to aggravate the illness and to disturb the patient because they involve the application of hot packs and the use of re-education exercises in the initial febrile stage of the illness: that they are wasteful of man-power and of material; that they are applied to many cases that, being of the abortive variety, do not require it; that they lead to unnecessarily prolonged immobilization of the patient on his back; that they handicap mobilization also by the neglect to use appropriate mechanical walking and other supports; that they omit the proper assessment of muscle weakness; that they tend to prolong pain and spasm and do not prevent the development of stiffness and muscle shortening. Finally, he says, patients are buoyed up by extravagant promises of cure. In no case are the results better than by the use of the methods commonly adopted.

These conclusions will tend to confirm doubts left in the minds of readers of Pohl and Kenny's book already referred to. The new concept was manifestly untenable, and it now appears that the method itself is open to objection, and claims made in respect of it have not shown the dispassionate and careful character we have the right to expect of them. It is particularly unfortunate that the direct appeal to the lay public by Press and radio, indicated by Key, should have been made. The public cannot be judges of pathological hypotheses or of therapeutic methods, and false hopes are raised by extravagant and ill-founded claims made in this way. It is not so many years ago that the scientific assessment of the value of convalescent serum in poliomyelitis was prejudiced by such publicly made claims. These claims effectively prevented the making of the necessary control observations, for public opinion in the countries concerned would not tolerate the withholding of serum, for which high claims had been made, from any proportion of cases. The only valid appeal when a method of treatment is under investigation is to expert judgment, given due time and opportunity of observation. A campaign that ignores this principle and flies to the public emotional appeal over the heads of the only proper tribunal does its cause a disservice and gives nothing to medicine.

The next session of the General Medical Council will open on Tuesday, May 23, at 2 o'clock, when the President, Sir Herbert Lightfoot Eason, will take the chair and deliver an address.

*Correction.*—The lecture on "Teaching and Practice in Preventive Medicine," by Dr. J. M. Mackintosh, noted in last week's issue, will be given on June 23—not June 2—at the London School of Hygiene and Tropical Medicine, and it is not a public lecture.

<sup>2</sup> *Amer. J. publ. Hlth.*, 1943, 33, 1244.

<sup>1</sup> *Surg. Gynec. Obstet.* 1943, 77, 389.