

THE DIAGNOSIS OF SMALLPOX

TO THE EDITOR OF THE CANADIAN MEDICAL ASSOCIATION JOURNAL:

SIR,—The science of medicine and surgery has made such rapid strides within the last quarter of a century, that we are to-day, if we know our science, in but little doubt in reference to diagnosis, for, like the mathematician, we can prove our case.

In a doubtful case with difficulty in differentiation between typhoid fever and appendicitis, we flee to the Widal test, diazo reaction, or blood count. In former days, before science made her last leap on syphilis, we frequently, when in doubt, gave potassium iodide and obtained such marked results that we felt we had proved our case. The microscope, with the fine work of the pathologist and chemist, has brought us to not only practise our profession for a livelihood but to enjoy the science.

It is with this idea of accuracy in reference to the so-called epidemics throughout our country that I am led to ask publication of the following remarks in reference thereto. It has been the experience in New Brunswick that, even though the physician in charge of a case reported it as chicken-pox, such cases of smallpox have been quarantined by the health officer without further notice, and even though men with much experience in epidemics of smallpox, where the death rate has been large, have one after another given their opinion that the disease was chicken-pox after careful examination of the cases in quarantine as smallpox, nevertheless the health officer in New Brunswick—and I presume it is the same in other provinces—continues to quarantine these cases as smallpox. Theologians differ in their opinion, as also do lawyers and physicians, but when we have a way of proving our case as will be shown further on was done in the central New Brunswick epidemic, it seems to me a question for a scientific commission to take out of the hands of political appointees, who sometimes receive increased remuneration according to their activities in epidemic times.

In December's issue of THE CANADIAN MEDICAL ASSOCIATION JOURNAL, I noted with interest an article, written by Dr. Whitelaw, of Edmonton, on a series of smallpox cases with some remarks on diagnosis and vaccination, and not seeing any remarks on the death rate I have concluded that all of Dr. Whitelaw's cases recovered

irrespective of vaccination. A little farther on in his article he treats of the infectiousness in this way: "If smallpox were as easily contracted as is popularly supposed from air infection and from contact with articles in the room through which the patient may have passed, or in which he may have stood, sat, or slept, and if all the elaborate directions as to disinfection and quarantining enjoined by the board of health regulations, which, owing to conditions existing in many cases, can be but imperfectly carried out, were justified by actual experience, there would be after a lapse of time only two classes of cases in Edmonton,—first those protected by vaccination and, secondly, those who had become protected by contracting the disease itself without falling into the hands of the undertaker."

And so I am led to wonder how smallpox has so changed within the last fifteen or twenty years without any scientific research giving us reasons. When we look at statistics of previous epidemics, there has, till very recently, been a mortality of ten to fifty per cent., and often seventy-five per cent. has been recorded.

At St. John, New Brunswick, a few years ago, the death rate was twenty-three per cent., although considered a very mild epidemic, in a city which can boast of its well-qualified physicians and surgeons. Perhaps Dr. Whitelaw has not heard of the epidemic of what was taken for smallpox, carried from Canada to Barbadoes, where the health authorities, at an expense of more than seventy thousand dollars in house to house visitation, vaccination and quarantining, did not succeed in checking the disease at all and there were thousands of cases without a death.

Is it not a scientific fact that vaccination will check smallpox? If not, why vaccinate, if we get no mortality out of hundreds of cases, for there is some risk and much discomfort in vaccination itself? Is it not a scientific fact that vaccine will not take on an individual who has had smallpox? In Osler's "Modern Medicine," on page 303, we find the following: "Inoculation of calves with smallpox material, with proper care, produces a disease indistinguishable from primary or 'spontaneous' vaccinia and giving the same protection against both smallpox and vaccination that natural cox-pox gives."

A few years ago, we had in central New Brunswick an epidemic of so-called smallpox, and thousand of dollars were spent in such quarantining as one would judge from Dr. Whitelaw's article was carried on in Alberta; there were no deaths, and the late Dr. Bayard, the father of the board of health of New Brunswick and its chairman

for forty years, and at the time of this epidemic still chairman, a man with a deep interest in the science of medicine, having had much experience in smallpox in the Old World and in that fearful epidemic which St. John faced about forty or forty-five years ago, wondering why there was no death rate in the hundreds of cases reported from central New Brunswick, wrote a request to vaccinate three cases which had been in quarantine for smallpox. This I did, selecting cases which physicians had seen covered with papules and scales from head to foot and showing at time of vaccination stains, or so-called scars, of vesicles: all three took. Another physician, while doing compulsory vaccination, vaccinated a man who had had this disease and been quarantined in a lumber camp a few months before in the province of Quebec, this also took. Dr. Bayard came from St. John into central New Brunswick to examine the result, and in writing reported the cases as successful vaccinations and therefore not smallpox.

In the many cases in the interior epidemic of which reference is made here, there was not one case, of the great number which I saw, in which the vesicles did not appear in crops, extending over many days, and in some cases they were covered from head to foot with vesicles and scabs at the same time, and yet not one vesicle was found to coalesce with another, and even in cases which were hideous to look at, in adults who had never been vaccinated, there was no secondary fever.

In an epidemic of smallpox in which the mortality was twenty-three per cent., a case of chicken-pox got into the smallpox hospital, where it contracted smallpox and died; yet Dr. Whitelaw tells us it is not a serious thing to mistake grippe or chicken-pox for smallpox.

Why has scarletina not ceased to be as contagious as it always has been? Why do we dread syphilis as much as ever? What has so changed the smallpox of Canada to such a mild non-contagious disease within the few years which have passed since the fearful Montreal epidemic?

HARRY H. McNALLY

Fredericton, New Brunswick,
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