

"(2.) The custom prevailing in some parts of the country of not promptly removing the dead hogs, or of allowing them to be gnawed at or even partially consumed by the living, is a potent cause for the perpetuation and strengthening of the infective agent. In such cases, the bacilli consumed may cause mild, unrecognizable attacks, with discharge of bacilli from the bowels, subsequently.

"(3.) Preventative inoculation with living cultures may disseminate and perpetuate the disease, because the attenuated vaccinal cultures may regain their normal virulence in the bodies of swine after a certain lapse of time.

"(4.) The waves of epizootic which appear to sweep over the country at long intervals may be due to a sudden increase of virulence of the specific bacilli, after they have passed through the body of swine for some years.

"(5.) Pathogenic bacteria are always a menace, and no pains should be shunned to restrict their dissemination and multiplication in every way, by quarantine, by disinfection, and by the destruction of the dead with fire if possible."

HOG CHOLERA AND SWINE PLAGUE ARE DUE TO DIFFERENT BACILLI.

The two diseases, while distinct, are usually seen conjoined in an outbreak of hog cholera; in fact, Professor Welsh asserts that the bacilli of swine plague are always to be found in the throats of swine, but they remain inert, at least non-pathogenic, until the hog cholera bacillus, by its effect on the intestines induces that disease, when they become active, and descend in the air tubes, produce a pneumonic affection to which the name of swine plague has been given. The two diseases thus occurring in the same herd perplex the uninitiated and lead to divergences of opinion.

SYMPTOMS.

The similarity of the symptoms with those of several other swine diseases, render it necessary that post mortems and bacteriological investigations be added to the clinical examination, before a reliable diagnosis can be made.

Thus, gastric and intestinal derangements from hotel swill and kitchen refuse feeding, lung and intestinal worms, swine plague, unsanitary housing, exposure to cold and damp will induce febrile conditions, bronchial irritation and other symptoms seen in hog cholera.

The common symptoms are: Increased temperature, which is variable; intolerance of cold, causing the animals to bury themselves in the litter, from which they are driven with reluctance; supersensitiveness of the skin, red blotches on the thighs, belly, neck and pubis; watering from the eyes, white at first, afterwards becoming purulent; staggering gait, sometimes a cough, which is aggravated when the animal is moved; short breathing, especially when there is also swine plague present; costiveness, followed by diarrhoea in the later stages; increasing debility, and, in young pigs, death after two days' illness.

The mortality is greatest in sucking pigs and shoats. In adult pigs, the symptoms are not well defined; in them it assumes a more chronic character. They usually have it in a mild form, appear to recover, but the peculiar button ulcers in intestines continue sometimes for years, rendering the excrement infective.

SYMPTOMS OF SWINE PLAGUE.

The general conditions found in both diseases are the same, the predisposing causes are identical. The bacterial study of them shows each to be due to its own special bacillus, that causing hog cholera being motile in liquids, whereas that causing swine plague is not motile in liquids; and Dr. Veranus A. Moore has shown that in hog cholera bacillus, from three to nine flagella are demonstrated, while no flagella have been found in that of swine plague. These bacilli will live in water from ten to fifteen days, and in soil from four to six days. The same general symptoms prevail in both, the