

the bronchi were generally open and free from mucus. But the state of hyperæmia, even after soaking (in spirits of wine), was very marked. The cerebrum and cerebellum were injected, especially the latter. The kidneys were perfectly healthy. The urinary bladder was fully distended with urine. The latter was pale yellow, acid, and yielded a trace of sugar. Our house dog scratched up the carcase of this rabbit after it had been buried. He was seen pulling it about and biting it; but I do not think he ate much if any, of it. He was, however, very sick the two next days. The stomach had been removed.

I took five grains of the powder of lobelia, which produced the most distressing sickness for about an hour, and a very disagreeable burning taste in the mouth and throat—quite *sui generis*.

It had been my intention to kill a rabbit by a blow on the head, in order to get an opportunity of examining the normal state of the lungs, stomach, and brain. A little *mal-adresse*, however, in performing two of my experiments, gave me this opportunity when I did not expect it.

EXPERIMENT IV. Whilst injecting the poison, a very small quantity got the wrong way, and the poor animal (a rabbit) was choked, and died in a few seconds. I opened the body immediately. A very few particles only of the powder were found in the trachea below the epiglottis; but none had got into the lungs, which were quite healthy, and not injected at all. The heart was distended. The stomach was quite full of food; its internal surface was somewhat corrugated. After maceration in spirit of wine, the internal mucous coat had a very slight pink tint, but no red patches; nor were vessels discernible even with the microscope.

EXPERIMENT V. The same accident happened to another rabbit. It was choked, and died in a few seconds. I found (twenty-four hours *post mortem*) a very small quantity of poison in the trachea. The lungs were white, and full of air at the fore parts, but the posterior lobes were dark red, and loaded with blood, even to a greater extent than in Experiment III. I have seen this in two rabbits to-day (May 20th), which had been killed for the table, and were quite fresh. There was no remarkable injection of the vessels of the stomach and intestines. The stomach was full of food; it was very little corrugated, and that only in one place. *It was not at all inflamed*. The greater part had the natural dull red colour and velvety appearance usual at the time of digestion; but no vessels were visible even under the microscope. The brain was not unusually vascular or injected. The heart was distended.

I much regret that I have not at present any means of access to any experiments upon animals similar to those which I have related. So far as these few experiments warrant us to draw any conclusions, they show that lobelia inflata is a powerful acro-narcotic poison; that it acts especially upon the brain and the stomach; that its action is manifested on the former by drowsiness and convulsions during life—by increased vascularity and effusions of blood and serum after death. Its effects on the stomach are evinced by nausea and vomiting during life, and inflammation after death.

REMARKS ON EPIDEMIC SORE-THROAT.

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THE occurrence of sore-throat, which has prevailed epidemically throughout this town for the last few months, is deserving of a few passing remarks, chiefly from the peculiarity which characterises its general features, and tends to distinguish it from the ordinary psoradic cynanche with which we are so familiar.

The invasion of this disease, which may with propriety be denominated epidemic pharyngitis, occurs with unequal severity in different cases; but, generally speaking, it is more sudden than what we notice in common sore-throat, the constitutional disturbance runs higher, the rigors are more violent and of longer continuance, the headache is more intense, accompanied in some cases with delirium, and an overwhelming sense of depression, restlessness, and anxiety, with an aspect of dejection; these symptoms, taken collectively, portray unequivocal evidence of the action of a specific poison in the system. It differs from scarlatinal sore-throat in the following particulars:—1. The fauces have not the bright vivid colour and papular appearance as in scarlet fever; the tongue is coated with a thick yellow fur; the papillæ are not projecting; and the edges and tip are pale and flabby. 2. There is not any efflorescence or desquamation of the skin. 3. The urine is high coloured, having an acid reaction, and depositing a

copious sediment of lithate of ammonia, containing no albumen, blood-globules, or epithelium-scales.

In cynanche tonsillaris the amount of inflammatory fever is dependent upon the extent of the local disease: but in the present epidemic cynanche, the constitutional suffering bears no adequate relation to the local inflammation.

Upon inspecting the throat, more or less inflammatory redness and swelling are seen, with small patches of erosion here and there, on the tonsils, velum or uvula; there is no ulceration properly so called, but simple abrasion of the epithelium without loss of substance of the mucous tissue; although the act of swallowing is painful and difficult, the swelling is never so great as to impede deglutition from the increased size of the tonsils, and abscess of these organs never takes place, or is of very rare occurrence; the aspect of the fauces is that of a dusky red colour, inclining to purple, instead of the florid redness seen in cynanche tonsillaris. The inflammation is not limited to the mucous membrane of the mouth, but generally involves the submaxillary, and sometimes the parotid glands. This is more especially the case in children; the neighbouring areolar tissue partakes of the inflammation, giving rise to considerable tumefaction, and in acute cases, terminating in abscess.

The debility consequent upon an attack of this kind is far greater than could have been supposed, judging from the apparently slight nature of the local affection; the prostration far exceeding any of the most aggravated cases seen in common cynanche, convalescence being frequently protracted for many weeks.

Although this disease is mainly produced by some inscrutable influence which resides in the atmosphere, forming its epidemic constitution, I have every reason to believe that it is communicable from one person to another; at the same time, from the obscurity which surrounds diseases of a kindred origin, I am quite sensible of the difficulty there is in attempting to establish the fact of its contagious property; but in confirmation of the opinion, I may say that I have attended six members of the same family, suffering from this disease at the same time. The attack was not simultaneous, but it occurred at distinct and distant intervals, varying from one to three weeks. These patients were all in immediate communication with each other, officiating successively as nurses one to the other, as each became attacked. In the same house there were servants who had no direct intercourse with the invalid family, but whose sole duty it was to attend to the domestic arrangements. They were not allowed to go into the suite of rooms occupied by the sick, so strong was the impression that the disease was infectious. As these servants escaped the disease, I would scarcely look upon their immunity as an ordinary coincidence; so, with a desire to profit by this precautionary measure, I isolated the first person attacked in the next family I attended, and by pursuing a rigid course of exclusion, I thereby prevented the extension of the disease to other branches of the family.

Although it may be impossible in so wide spreading an affection thus to confine its ravages in every instance, still I am satisfied from the numerous examples I have had, that by a well directed surveillance its propagation may be considerably limited, and its duration greatly abridged.

We have some early records of epidemic pharyngitis as it appeared in Holland, Spain, Naples, and America, likewise in Paris and England, in the seventeenth and eighteenth centuries. This was essentially an inflammation of the mucous membrane of the pharynx, serious in its nature and complicated in its relations, attended with a pseudo-membraneous exudation called diphtherite, so ably described by M.M. Bretonneau, Rilliet, and Barthez. This affection was confined principally to children, and I am not aware that any author has given us an account of an epidemic pharyngitis uncomplicated with exudation either in children or adults.

Some difference of opinion prevailed whether diphtherite, which is an analogous disease to the epidemic pharyngitis we are now considering, was contagious or not; but from the facts collected by M. Guersant, he believed it was so, in which opinion Rilliet and Barthez concurred.

As regards treatment, I have found nothing so effective as chlorate of potash, given every four to six hours in five-grain doses. It appears to exert a specific influence over inflammatory affections of the mouth and throat; its local effect in the shape of gargle is of no less importance than its internal administration. It lessens the fœtor and imparts a healthy stimulus to the mucous membrane, rendering the secretion less viscid, and the painful efforts to hawk up less distressing.