

seasons, have been too seldom observed to allow any conclusions concerning them to be drawn. As to the *prior state of health*, in 4 cases out of 40 only did the disease show itself as a suffocative angina, the patients being in good health at the time. In ten instances the affection appeared in the course or convalescence of typhoid, or other severe form of fever; and in 12 in the course or convalescence of various other diseases, as pneumonia, scarlatina, erysipelas, &c., &c. In nine cases it followed laryngeal phthisis, in one cancer, and in two syphilis of the larynx. In two cases the state of health was not indicated.

"When an inflammation is developed within, or only even near to, a part of the body where there is abundance of cellular tissue, we soon observe it become more or less engorged with serum or sero-purulent fluid, according to the violence of the inflammation. This is seen to be the case in the subcutaneous cellular tissue in inflammation of the skin; as also in the palpebral cellular tissue, when there is inflammation in the vicinity of the eye, or in the eye itself. This is also seen after a simple section of the prepuce, when the cellular structure often becomes infiltrated in a very notable manner. This effect may be observed in subjects otherwise in good health, but it is much more frequently produced when they have been enfeebled by prior disease, and the blood has become impoverished; or there is a tendency to general *œdema*. We find here an explanation of what occurs in the larynx when a violent angina affects a healthy subject, and when even a slight angina, having its principal seat in the larynx or pharynx, attacks a subject affected with, or convalescent from, another disease. But to pursue the comparison: if an ulcer is developed with a certain degree of irritation in one of the portions of the body already mentioned, its edges are seen to swell, and the irritation spreading farther and farther, the neighbouring cellular tissue is infiltrated. This effect is remarked in chronic ulcers, when by some cause they become much irritated, as well as in acute ulcers. The same thing is seen passing around an abscess, whether a simple one, or one connected with caries of bone. In studying the facts I have now indicated, one may see, so to speak, demonstrated on the surface of the body, the various phenomena which terminate by producing the serous or sero-purulent infiltration of the larynx, and further, we see the reason of the predilection the *œdema* assumes for the aryteno-epiglottic folds of mucous membrane, the cellular tissue being here much less compact than elsewhere."

*Symptoms*.—Pain and tenderness in the region of the larynx or pharynx, with or without difficulty of deglutition, has been noticed in nearly all cases. The cough and expectoration have frequently not been even remarked upon by authors, and are only of a secondary importance. The change of voice is a very frequent, if not constant, sign. "It is at first raucous, then marked, then low, becoming in most cases extinguished, or almost so, towards the end of the disease. In one case alone it has been designated as croupal." Although dyspnoea is usually a principal symptom, it is in some cases not very marked. In 35 cases out of the 43, however, it has become at times suffocative. As observed by Bayle, the difference of the difficulty in inspiration and expiration is frequently very great, the former being far more noisy and laboured than the latter. In most cases, the inspection of the *fauces* seems to have been neglected; but in all the 13 in which they were examined, lesions of the pharynx, to a greater or less extent, were observed. It is, however, sometimes difficult to get the mouth sufficiently open. The examination with the finger, too, seems to have been seldom practised, although, in those cases in which it has been done so adroitly, the tumefaction of the glottis has been felt satisfactorily. The digestive organs are not usually much disturbed, but there are great fever, thirst, and restlessness. The countenance exhibits marked change, especially during the paroxysms.

*Progress and termination*.—The debut of the disease is hardly ever sudden, but once developed, it is often very rapid in its progress. When it results from a chronic lesion of the pharynx, its first announcement may be a suffocative paroxysm. When it is produced by simple inflammatory action the progress is rapid in proportion to its intensity, and it is then more uniform and less interrupted in its progress. In lesions of the larynx the paroxysms are more distant, and separated by intervals of calm. In some cases the paroxysms are truly dreadful to behold, of frequent occurrence, and long duration. Of the forty cases alluded to only nine were cured. Three only died during the existence of the paroxysm, and seven during a calm interval, in which all seemed going on well. In the other cases, death, although not actually occurring during the paroxysm, did so in the condition of asphyxia, which had become permanent. One perished during the operation of tracheotomy, one ten hours, and another 52 hours, after its performance. The duration of the affection is very variable, as the circumstances attending it are so different; and death at periods varying from a few hours in one case, to 26 days in another, has been observed.

*Diagnosis*.—This, which would seem easy enough, has nevertheless in some cases been attended with difficulty. If, with the precursory symptoms already mentioned, and paroxysms of suffocative dyspnoea, we are able to feel an *œdematous swelling* at the top of the larynx, by means of the finger passed rapidly into the mouth, this being widely opened, the diagnosis is almost certain; not quite, indeed, for some tumours, in the vicinity, have simulated these *œdematous swellings*, as may collections of matter in the pharynx or *œsophagus*. Other affections of the larynx itself may render the diagnosis also obscure, as laryngitis terminating in suppuration, the seat of the formation of matter being the posterior walls of the larynx, and generally just above the cricoid cartilage. In one such case only was the pus found in the aryteno-epiglottic folds—the usual seat of *œdema*. The suffocative paroxysms in this case are much less severe. In *false croup*, we observe that children are almost always the subjects. The symptoms nearly disappear in the intervals of the paroxysms, when the voice becomes almost natural, and no tumefaction is found on the exploration of the larynx. In *croup*, children are also the subjects, and false membranes are usually found in the pharynx. The only pathognomonic sign of *œdema* is, however, the presence of the *œdematous tumours* at the superior aperture of the larynx. *Œdema glottidis* is sometimes *latent*, and M. Louis reports two or three cases in which the symptoms did not manifest themselves until just prior to death—these patients being already brought into a dying state by the severity of other long-continued disease.

*Prognosis*.—This is of the gravest character, since whatever is done, almost all die. The less the lesion which has given rise to the *œdema* has disorganised the tissues, the more chance there is of a cure being effected, if active means are employed.

"In pronouncing upon the degree of gravity from the symptoms observed, each case must furnish its own elements for decision. In a general manner only we can say that if the strength yet continues, the pulse is regular and strongish, if the features are not much changed, and the face not livid; if the efforts to enable the air to penetrate into the lungs are yet energetic, and if the wheezing or other noise is heard in the larynx with power enough to show that the air does, although with difficulty, penetrate into the lungs, we may have hopes that the disease will terminate favourably. If, on the other hand, the patient is prostrated; if his features are changed, his lips blue, his eyes haggard, his face cadaveric, as described by Bayle, if he has no longer the power of making the same respiratory efforts he did before, if the inspiratory *sifflement* has lost its energy, without respiration becoming deeper and easier, we