

sloughing tissue, which imposed on early observers. If detached from connection, a number of minute bloody points on subjacent tissue attest the firmness with which false membrane adhered to it, but beyond increase of their vascularity the parts do not in general display any marked alteration." "I doubt, however whether that rigid classification which would refer all these cases in which exist distinct erosion or ulceration beneath to a separate category is useful.

Bristowe's description of same: "Exudation white-greyish, opaque, well-defined patches on congested surface, often on both tonsils vary in thickness, more or less coherent, moderately adherent to subjacent surface, which is left excoriatid but not excavated by their removal."

"Dr. Wilks, referred to as authority on pathology, but a professed duallist, says, "that after long and careful consideration he could find no anatomical difference between diphtheria and croupous exudations.

West says: "I have come indeed to the conclusion which I long hesitated to adopt, that whatever differences soever existed between croup and diphtheria, they must be sought for elsewhere than in the pathological changes observable in the respiratory organs; and when once it has invaded the air passages, diphtheria seems to produce precisely the same changes, to the same extent, and with the same rapidity at least as primary croup."

Greenfield examined microscopically the air passages of twenty cases arising from most various etiology, and general condition, and concludes that whether regard be had to membrane itself, parts subjacent, or presence or absence of micrococci, no certain line of demarcation can be drawn between any classes of cases from morbid anatomy alone. The large majority of cases were due to one set of causes, those also concerned in producing diphtheria.

"Virchow formerly held there was a distinction, but latterly gave it up because he found in practice that the too alleged forms of exudation were alike. He, however, maintained that death of adjoining tissue is the characteristic feature in diphtheria.

This latter view has, however, been shown also to be incorrect, ulceration and necrosis not being the usual accompaniment of diphtheria, though it may take place, while such a change does sometimes take place in croupous cases.

Wagner declares there is no difference in the exudation.

Rindfleisch also.

But Wagner and Oertel differ; see Ziemssen vol. 6, page 925, and vol. 6, page 959.

Authorities for this statement could be multiplied, but these given have such weight that it is unnecessary.

Fourth, Albuminuria has been considered as a peculiar accompaniment of diphtheria. Such is not the case. It is not always

present in diphtheria, and it is sometimes present in cases of croup.

Fifth, as a sequela of diphtheria, certain forms of paralysis are well known to appear, and the fact has been brought forward as a distinction from croup. It may be difficult to controvert this point, for it is only in a small proportion of cases of diphtheria of all localities, and which recover, that paralysis appears. I do not know what percentage but it is not large. As 90% of cases of membranous croup of whatever causation do not recover, there is only 10% of a not very prevalent disease to examine for this sequela. Therefore, even if paralysis occurred as often as in general diphtheria, one might be baffled for a lifetime in finding a case arising from tracheal croup.

But yet *it is asserted* to have been observed as following cases cases of membranous croup.

These are the points usually made to prove the dual character of the disease, for years they were not disputed, but later research has disapproved their validity and they are no longer tenable.

Some reason or arguments for belief in the identity of the two may be given, and in doing so it may be taken for granted that diphtheria is a well-marked contagious disease, while croup, if of simple inflammatory origin, is not so.

It has happened to many to have a case of membranous croup manifesting itself by the usual symptoms laid down by older writers, and being treated as a disease of sthenic character, in which several days after the onset undoubted proof of diphtheria has been discovered, when such a course was never suspected. Patches of membrane have appeared on the tonsils, palate nares or mucous membrane of other orifices, or on branches of the skin, and have also infected those in attendance, with diphtheria. Instances of such a circumstance has especially happened after tracheotomy performed without any thought on the part of the operator than that of the case being one of simple membranous croup. The sequence of events in such cases is too evident to require pointing out.

The following cases occurred in my own practice, and one of them at least can be corroborated by a gentleman likely present. In September a little girl 8 years old had complained for a day or more, and when she was first seen had the hoarse cough of croup. Nothing abnormal could be seen in the