CHORDITIS FIBRINOSA.

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II.

IN my paper on the above subject in the January number of this Journal, owing to an unfortunate oversight no reference was made to a contribution by Major Archer Ryland entitled "The Laryngeal Changes induced by Mustard Gas," which appeared also in this Journal in May 1919. The affection described in both papers is obviously the same, although the respective views on certain points are at variance. The discussion of these in my previous communication would have added to its interest and value. On this account and because of the seeming discourtesy to Major Ryland, I regret the omission and now beg to deal with the matter.

Ryland states that his paper is based on a large number of cases examined by him while laryngologist at the 73rd General Hospital. One reason given for publishing these observations is that he knows of no exact account of the changes that occur when mustard gas comes into contact with the larynx. He finds that the interval between the exposure to gas and the appearance of the lesion typical of the "gassed larynx" is very variable but, on an average, three days. Necrosis of the epithelial cells of the middle third of the true cords seems to result from the gassing. This localisation, he thinks, admits of a simple explanation, viz., the manner in which the true cords can be partly concealed by the movement downwards and backwards of the cushion of the epiglottis, and inwards and forwards of the arytenoids, and the approximation of the ventricular bands. That portion of the cord which remains unconcealed in this position of the larynx is that which undergoes necrotic change. On laryngoscopic examination both extremities of both cords are found to be red, while the mesial longitudinal halves of the middle thirds appear as smooth, slightly raised yellowish surfaces. The yellow fibrinous slough overlaps the mesial free edge and so interferes with vocalisation. In course of time the edge becomes less regular, and may assume a notched or serrated aspect. The yellow fibrinous slough clears up in a constant manner, namely, from without mesially until only a very narrow strip lies along the free edge

https://doi.org/10.1017/S0022215100021721 Published online by Cambridge University Press

of each middle third, leaving the area of cord from which it has receded a full pink colour. The appearance is now that of chronic simple laryngitis. Aphonia in the post-slough stage is due to myopathic paresis, is difficult to treat, and may last much longer than the phase of the typical lesion. While the slough persists all cases are detained in hospital and receive each, or every alternate day treatment by direct application to the cords. A weak solution of menthol in liquid paraffin has proved useful. As soon as the necrosed area clears up, the case is sent to a convalescent camp, and attention is paid to the general health and nasal breathing.

The above résumé of Ryland's paper shows that his observations of the laryngoscopic aspect and the course of development of the affection under consideration are in agreement with those of Fränkel, Seifert, and the writer. He regards all his cases as due to mustard gas, and does not refer to influenza as a possible cause, while Seifert, without mentioning gas, attributes all his cases, as did also Fränkel, to influenza. More than half of my patients (twenty-three out of forty) had been gassed, and only three had had influenza. I have no doubt as to the occurrence of chorditis fibrinosa apart from gassing, for ten of my patients developed this affection while on service in this country. Further, in my previous communication, I expressed the opinion that although in a considerable proportion of my cases of chorditis fibrinosa the men had been exposed to gas, the exudation on the cords in this affection was not solely or directly due to gas, for in other six cases when mustard gas had certainly affected the larynx, and sometimes also the pharynx, an entirely different picture was produced. Irregular patches of membrane were then found on the epiglottis, occasionally on the arytenoids and ary-epiglottic folds, and less often on the ventricular bands, but never on the true cords. Ryland may have met with such cases in his large material, but does not refer to them.

Ryland attributes the localisation of the deposit on the middle third of the cord to the exposure of this region to the gas, and the escape of the anterior and posterior extremities to their protection by the epiglottis and arytenoids. In my paper the view was advanced that the exudation formed on the vibrating part of the cord while the fixed extremities escaped. The writer believes that the latter theory better accounts for the fact that the original extent of the membrane may vary

https://doi.org/10.1017/S0022215100021721 Published online by Cambridge University Press

considerably in different patients (p. 6), and for the manner in which the membrane clears up and is last seen at the middle of the ligamentous cord (p. 9).

Ryland's observations are thus a valuable contribution to the laryngoscopic appearances in chorditis fibrinosa; he shows that mustard gas may play an important part in the causation of the affection, and he offers a new explanation of the localisation of the fibrinous exudation.

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