OXYGEN GAS IN ACUTE RESPIRATORY AFFECTIONS.

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My experience of the effects of oxygen in the following case has convinced me that Drs. Lauder Brunton and Prickett have done good service in calling attention afresh to the therapeutic use of this gas. As in the instance which they describe, a fatal issue was not averted; but the effect was such as to indicate the probable value of oxygen under more favourable conditions.

Last October, Dr. Parsons, of Cotham, asked me to see in consultation with him a gentleman, aged 66, who for many years had suffered from bronchitis and emphysema. At that time there were no urgent symptoms, but the patient had advanced pulmonary emphysema, with secondary dilatation of the heart, and in consequence was always the subject of more or less dyspnoea.

On January 24th I saw him again in consultation with Dr. Parsons and Dr. Newman, of Bristol. His temperature was then 102.8°, and he was wandering; dyspnoea and cyanosis were very marked, and extensive bronchitis and broncho-pneumonia existed. Next day there was no improvement, and we therefore decided to administer oxygen. At 7 P.M., when the inhalations of the gas were begun, the pulse was rapidly failing, the surface was very dusky, and the patient was fast approaching his end. The immediate effect of the oxygen was most striking; the pulse improved wonderfully in tone, and the cyanosis completely disappeared; as the hands were watched the blue colour under the nails could be seen fading away and giving place to a healthy pink. The change was so marked that it was evident to all present. When the inhalation had ceased for a few minutes, however, the pulse again began to fail and the cyanosis to return—to be again removed by the fresh administration of the gas. This sequence recurred again and again, until at length the oxygen was given more or less continuously. Strychnine was also injected subcutaneously. In the early hours of the following morning, however, the effect began to be less marked, and the patient gradually sank and died about 9 A.M.

The influence of the oxygen in this case in removing cyanosis was extraordinary and altogether beyond doubt. The conditions under which it was given, however, were most unfavourable. The occurrence of extensive bronchitis and broncho-pneumonia upon long-standing and advanced emphysema with weakened heart made the outlook practically hopeless; but we were convinced that at all events life was prolonged by some hours, and Dr. MacCarthy, of Worcester, who was present during the night and kindly helped with the inhalations, concurred in this view. In my article in Cassell's *Year Book of Treatment for 1892* (p. 40, sec. 2) reference is made to a case of pneumonia reported by Dr. Blodgett, in the *Boston Medical and Surgical Journal*, in which the influence of oxygen is said to have been "almost as pronounced and evident as is that of ligature in hæmorrhage," and in the face of our experience this can hardly be considered an exaggeration. I have never seen such an extraordinary effect upon cyanosis produced by any other means, and for the future in any case of acute respiratory affection threatening to prove fatal I shall not consider that everything practicable has been done unless a fair trial has been given to oxygen.

The gas was obtained in cylinders from Brin's Oxygen Company, 34, Victoria Street, Westminster, and by the courtesy of the local agent, Mr. C. H. James, of 30, Broad Street, Bristol, it was received in Bristol within five hours of the despatch of the order. The company supply a simple apparatus, consisting of a rubber bag connected with the cylinder, and also with a tube to which a mouthpiece can be attached. The bag can be hung up above the level of the patient, so that the gas which enters it from the cylinder escapes slowly through the delivery tube by its own weight and the collapse of the bag.

When the inhalation was begun the patient was breathing through the mouth; but directly the end of the tube was put into his mouth he grasped it with his lips and breathed through the nose alone. The tube was therefore fitted into

an ordinary naso-oral celluloid inhaler, which answered well. No unpleasant effects were produced. It is better to use the bag rather than to give the gas direct from the cylinder, as it is contained in the latter under such pressure that it is difficult to regulate its escape.

Now that pneumonia and bronchitis are so prevalent and so fatal, the recognition of the value of oxygen in staving off asphyxia and stimulating the heart may lead to the saving of life in otherwise hopeless cases.

ON THE USE OF OXYGEN IN ASTHMA AND CONVALESCENCE.

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I READ with great interest the remarks of Dr. Brunton on the use of oxygen in pneumonia, published in the *BRITISH MEDICAL JOURNAL* of January 23rd, as also those of Mr. Langton on the use of oxygen in bronchitis the following week. I can corroborate the testimony of both these gentlemen as to the usefulness of oxygen in bad cases of pneumonia and bronchitis. I administered oxygen in three cases of pneumonia and one of acute bronchitis; all were unusually severe cases, and all recovered, and I firmly believe that life was saved in two of these cases by the use of the oxygen. I have also used oxygen in three cases of asthma. In all three cases Curschmann's spirals were present in the expectoration. The results in two of these cases were so satisfactory that I strongly recommend an extended trial of the treatment.

The oxygen was administered through an inhaler connected with Brin's cylinder, and given at the commencement of an attack. After some half-dozen inhalations the inspiration became longer, and the patient was less distressed. In two of the cases a few more inhalations sufficed to cut short the paroxysm. In the third—of twenty-years' standing—the relief did not pass beyond the first stage, that is to say, diminished distress and prolonged inspirations, but in one of the others the paroxysms became much less frequent (about half) than they were before the treatment commenced, and less oxygen was required during subsequent paroxysms, while in the other the dose had to be increased each time. I found the benefit to be much greater and quicker when the oxygen was given warm.

I have also given oxygen in convalescence from long illness, combined with massage. One patient told me that after he had inhaled the oxygen and been massaged he "felt as if he had been a six-mile walk and breathed sea air."

In oxygen I believe we have a remedy of great therapeutic value, not solely confined to the treatment of diseases of the respiratory organs. If we only consider for one moment its importance to us in its natural state in the air, and think how many of our patients, especially those in London and other large towns, fail to get their due proportion of it in its native state, it is only natural that it should be so.

In massage and electricity combined with the administration of oxygen we have one of the best substitutes to the convalescent and debilitated constitution for change, exercise, and sea air.

SIGMOIDOSTOMY SIMPLIFIED.

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MR. H. A. REEVES is quite right in surmising that he may have been anticipated in the performance of "sigmoidostomy" described by him in the *BRITISH MEDICAL JOURNAL* of January 9th, 1892. To M. Maydl, Vienna, is due the credit of originating the method, and to M. Reclus, Paris, the credit of simplifying it. Maydl's first operation dates February 4th, 1884, and his method was referred to by Albert in the *Lehrbuch der Chirurgie*, 3rd edition, vol. iii, p. 145, 1885, and was described by Maydl himself in the *Centralblatt für Chirurgie*, 1888, No. 24, p. 433.

The following are briefly the salient points in his method. The sigmoid flexure is drawn out until the mesocolon is seen;