Notes on the Treatment of Acute Oedema of the Lung

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During the last two or three years, having had several opportunities of observing the surprisingly good results which follow an injection of pituitrin and adrenalin in attacks of asthma, I was struck by the possibility of similar happy results in the treatment of acute œdema if the lungs—in the pre-œdema stages of which the symptoms are almost identical with these of an acute attack of cardiac or renal asthma.

A few days ago, at 2 p.m., I received an urgent call to a primipara who had been delivered of a still-born child, thirty hours previously. She had no albumin in a specimen tested two weeks previously, but during the last few days had had one or two fainting turns, and her legs and hands had swollen considerably. This œdema had almost all disappeared within twenty-four hours of the child's birth. The telephone message was that she had fainted while on the bed-pan.

I arrived at her house inside ten minutes, and found her propped up in bed gasping for breath, apparently in extremis. She was a ghastly livid blue colour. In comparison with her colour and dyspnœa her pulse was surprisingly good. Her condition was then almost identical with that of an acute attack of asthma. Crepitations were present all over the chest. She had had no pain in her chest of other symptom suggestive of pulmonary embolus.

I gave her a hypo of atropine sulph. gr. 1/50, morphine sulph. gr. 1/4, and strychnine gr. 1/20, followed in about ten minutes by B.W. Infundin, 1 c.c. I had no adrenalin in my bag.

By this time she had commenced to bring up the typical pink frothy fluid, and had soon soaked through half a dozen large cloths. Recovery, however, quickly took place, and the cough and expectoration entirely ceased. Within two hours her pulse was 120, and respiration 30, and except at the bases all the crepitation had vanished.

At 9 p.m. she had a second attack. The nurse gave her the same hypodermic of atropine, strychnine, pituitrin, with morphine gr. 1/6 this time, and sent out to ring me up.

The patient had a desperate struggle, and for over two hours the issue was in doubt. She commenced bringing up mouthfuls of the pink frothy fluid soon after I arrived, but eventually rallied considerably, and I felt it safe to leave for some oxygen. I had brought up some adrenalin, but did not give it owing to her recovery from the previous attack and the expectation of her repeating the performance. When I left I filled a hypodermic syringe with m. vii. adrenalin, and told the nurse to give it should anything untoward happen. Some twenty minutes later I was busy testing an oxygen cylinder when a telephone message was brought me to come back at once, as the patient was very bad. They had to telephone from a neighbour's house and so I was not able to get back till about twenty minutes after she had again relapsed. Expecting to find her dead, I was very agreeably surprised to find her smiling cheerfully and sitting up, very well indeed. The nurse told me she had sent the husband to ring for me as she thought the patient was so desperately ill that she could not possibly live for more than a minute or two, and she wanted him out of the house. She then gave the patient the adrenalin. For some minutes the patient sank still a little more, but suddenly a miraculous change took place, and within ten minutes the patient was ever so much better than she had been at any time since the start of the first attack. Recovery afterwards was quite uneventful.

I have absolutely no doubt but that the adrenalin saved her life, and consider it should be added to the list of drugs that are recommended in pulmonary œdema.

Personally, I lacked sufficient courage to give it at the commencement of the second attack, but I thought it safer to depend upon the remedies which had proved successful in the first, and also felt that adrenalin was so potent a drug that an experiment was inadvisable. In this case, however, it proved successful where other remedies usually given, had conspicuously failed; and when their physiological action was distinctly on the wane.

So far I had not seen it recommended in connection with a case of this kind.

A catheter specimen of urine next day showed three grams of albumin per litre.

There was also a very faint mitral systolic murmur, and a fair number of crepitation at both bases.

Recovery was uncomplicated, and in three weeks the patient was able to commence some work about the house.

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