

ture, and she appeared uneasy when placed on her right side ; she was, therefore, placed on her left when the stertor ceased. A blister was applied to the nape of the neck, and she remained in this position for nine days. She was now better and spoke to me. Fearing a bed sore, I desired the nurse to change her position, by turning her from her left to her right side. Soon after this was done, she was distressed for breath, and the countenance became livid. On my arrival, I found the difficulty of breathing gradually increasing ; the blistered surface, as well as the ear upon which she had lain, of a dark purple hue ; and the pulse, which had before been weak and irregular, full and bounding. There were large mucous *rales* over the whole chest ; she was quite unconscious, and death from suffocation was imminent.

Finding that these symptoms supervened upon the change of position, I had her placed upon her left side, and immediately the pulse sank, the mucous stertor ceased, the breathing was relieved, the lividity of countenance passed away, and the blistered surface, which had been almost black, resumed a bright cherry-red color. This additional shock, however, proved too much for her, and she died the same day, peaceful and conscious.

The salient points of this interesting case are these : 1. Pharyngeal stertor ceased when the patient was placed on her side ; 2. There was a slow but gradual improvement subsequent to this ; 3. Mucous stertor and imminent death supervened when she was changed to the opposite side ; 4. Instant relief followed on resuming her original position ; 5. A return to consciousness was coincident with the cessation of stertor ; in other words, with the removal of the respiratory difficulty.

On a careful examination of the chest after she became quiet, I found all *rales* slowly fade away from the right side, or that which was uppermost, and the natural breathing return ; but the left lung, which had been dependent throughout, was dull on percussion, and deficient in respiratory murmur.

The explanation now became clear, viz., that the dependent lung had become filled with some mucous fluid, and that, on changing the side, the fluid by gravitation was finding its

way across the trachea to the opposite lung ; but, in doing so, it had been churned to foam by the ingoing air, giving rise to mucous stertor ; and this foam, by filling up the larger bronchial tubes, was quickly causing suffocation, with all its usual results.

As a point of management, then, in cases of apoplexy, it would appear necessary to keep the patient on one side, and not to change it ; but which should this be ? Healthy people, when lying on the side, breath chiefly with that side which is uppermost, for the intercostal and other thoracic muscles of the lower side are fixed between the weight of the body and the bed, and the breathing of this side is almost entirely diaphragmatic. It must be remembered, too, that in placing the paralysed side downwards, the injured side of the brain is upwards, and, therefore, relieved from hypostatic congestion, a condition always liable to occur when an injured part remains dependent.

In my original paper, in the *Transactions* of the Royal Medical and Chirurgical Society, three varieties of stertor were defined :

1. *Palatine Stertor*, when the air, in rushing through the nose or mouth, causes a vibration of the soft palate.

2. *Pharyngeal Stertor*, when the air passes through the narrowed interval between the base of the tongue and the posterior wall of the pharynx.

3. *Mucous Stertor*, depending upon air bubbling through mucous in the larger air-tubes.

Besides these, there is occasionally, but only very occasionally, what may be called a *laryngeal stertor*, heard most commonly during the inhalation of chloroform, which has been pointed out by Professor Lister. Whether this arises from a spasm of the glottis, or from paralysis of some of the laryngeal muscles, I am not prepared to say. There is, however, a *nasal stertor* which belongs more to the apoplectic state, and, as far as my experience goes, is often a symptom of the gravest kind. It arises from paralysis of the nerves supplying the elevators and dilators of the *alæ nasi* ; so that the ingoing air, as in sniffing, draws the *alæ nasi* towards the septum, and sometimes causes a serious obstruction to the breathing, and certainly hastens death, as well as needless-