

and eleven hours before death as very marked. About forty-five minutes before death, sterno-mastoid breathing, as described by Chase, was noted.

It appears, therefore, that these two respiratory symptoms are of serious import. When tracheal breathing occurs, the patient is as a rule in a serious condition, and in many instances will not recover. When sterno-mastoid breathing sets in, if the observations of Chase are correct, the patient never recovers.

It is rather curious that neither Chase nor Shrady appear to have been acquainted with the symptom to which the other attached so much importance.

I shall not, in this paper, attempt to give any explanation of these symptoms, beyond the fact that I consider they are due largely, if not entirely, to excessive and uncontrolled action of the accessory respiratory muscles and muscles associated with them in action, and that they indicate a last desperate effort on the part of the recuperative forces of nature to overcome the forces that are tending towards the destruction of the individual life of the patient.

#### REFERENCES.

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- (2) Allbutt's System, 1st edition, Vol. I., p. 747.
- (3) "Atlas of Internal Medicine and Clinical Diagnosis," p. 37.
- (4) *Dominion Medical Monthly*, July, 1906, p. 7.
- (5) *New York Medical Record*, June 8th, 1889.
- (6) *Buffalo Medical Journal*, June, 1890.
- (7) *New York Medical Journal*, Aug. 25th, 1906.