

breathing quiet, the heart and respiration suddenly stop without warning, or one of such an evanescent kind that only the keenest observation will detect it. The fleeting danger-signal alluded to is indicated by a pallor around the mouth projecting upwards beside the alae of the nose, and if the finger is on the facial or temporal pulse an irregularity and then intermittency occurs. If one is quick enough artificial respiration may be started before the pulse disappears.

Heretofore I have said little about the pupil as a signal when danger is imminent, for I have found that in the case of most anesthetics it is unreliable.

In chloroform anesthesia it may, perhaps, be more of a guide, in conjunction with other signs. However, when a patient's pupil is found to be a reliable guide, it affords the earliest signals of danger and the surest signs of safety. The pupil is much contracted, the patient insensible, when no danger is near, but on the slightest amount of over-dosage being given it dilates. Now is the time to resort to measures to effect restoration.

This dilatation of the pupil from overdosage must be distinguished from the same condition when the patient is emerging from the narcosis, and also just before nausea and vomiting ensues. Here the utmost caution is needed. In the latter the patient will show signs of returning consciousness, in the former the condition of deep anesthesia will persist, the pulse will be almost imperceptible and respiration hampered. When the dilatation of the pupil results from returning consciousness, the treatment is a fresh supply of chloroform, which will also usually prevent vomiting and cause the pupils to return to their normal size. In dilatation of the pupil produced by the surgeon's manipulation of sensitive parts, the anesthetist will continue to give the anesthetic.

When *vomiting* occurs in spite of all efforts to prevent it, the head must be turned aside and free outlet given to the vomited matter, and if necessary cleanse the mouth with the finger covered with gauze. The danger to be avoided in this emergency is the sucking backward into the larynx of vomited matter when the patient draws in the deep breath following the emesis.

A word in conclusion. Signs of danger and collapse may arise at any time from the induction period until the last drop of the anesthetic is given. It therefore behooves the administrator to be impressed with the fact that during an administration of any anesthetic eternal vigilance is the price of safety.