

feeble, often being imperceptible. Sometimes, however, violent and irregular action of the heart is observed. Again, lividity of the face and stertorous breathing may be prominent symptoms. A cold sweat often breaks out on the face. A violent cough has been present in a few cases. In one case auscultation of the heart revealed a churning sound, completely masking the natural valve sounds.

Dr. Simpson gives prominence to the "evanescent red scarlatinoid rash over the body," which he saw in several cases, and which, he suggests, may possibly be due to a direct mixture of the introduced air with, and consequent oxygenation of, the blood in the capillary vessels.

*Post-mortem Appearances.*—Autopsies have been made in a number of cases in which death occurred soon after parturition from this cause. None that we have seen recorded are any more satisfactory than that of Simpson; hence we give it. The patient had been delivered of twins, hæmorrhage had occurred, with alternate contractions and relaxations of the uterus; a number of the symptoms named above presented, and the patient died in a few hours. Suspecting that death had been produced by the entrance of air into the uterine veins, "the body was opened a short time after death, because it was considered desirable not to incur the fallacy of air being present from decomposition. . . . To make the examination more certain, the abdomen was opened under water. The lower vena cava, but especially the uterine and hypogastric veins, were distended with frothy blood, and air bubbled up through the water when any of these tubes were opened. The larger veins of the extremities were in the same state" (*op.cit.*) Nothing is said of the heart in this case; but of nine cases, narrated by Mr. George May, Jr., air was found in the heart in five. In one case the "right auricle was distended with air. Hardly a trace of blood existed in the heart." In another, in which the autopsy was made before the body was cold, the heart appeared distended, and "on opening the right auricle a quantity of air escaped with a sort of little puff, and the organ was at once reduced to its proper dimensions" (*Am. Jour. Med. Sc.*, Oct., 1857, from *Brit. Med. Jour.*, June, 1857). In cases recorded by other observers, the heart has been found distended with frothy blood.

*The proximate causes of death* in these cases is a point upon which authors differ widely. The following points seem to us to embrace the most rational, and are perhaps the most generally accepted, views of the profession.

1st. Distension of the heart by air, or air and blood beat into a spumous mass.

2d. Consequent imperfect closure of valves.

3d. Inability of the heart, on account of these conditions, and from the presence of frothy blood in the pulmonary artery, to propel a sufficient quantity of blood to the lungs.

4th. Consequent diminution or loss of healthy supply to the brain and nervous system.

These views are not inconsistent with the opinion of Gross, who attributes death to "a want of suffi-

cient oxygenated blood in the great tripod of life—the heart, lungs, and brain."

The above-named six causes—viz., syncope, shock, embolism, pre-existing heart disease, hæmorrhage, and entrance of air into uterine sinuses—account for a very large proportion of sudden deaths that occur during or soon after parturition. There are, however, a number of minor causes that may operate in rare cases to bring about this unfortunate result. Among these we may mention *pulmonary oedema*. There are a number of conditions not unfrequently present in the puerpera that may give rise to this result. We may name among these, degenerative lesion of the kidneys; anæmia, with dilatation of the heart, both conditions predisposing to serous transudations; general oedema of pregnancy, which, as Meigs says, renders the patient prone to effusions into the pericardium and lung substance; and the long continued recumbent position favoring, especially when there is a low condition of the system, hypostatic congestion, which precedes lung infiltration, from which speedy death by apnoea may result.

Again, Dr. Madden has reported a case of sudden death resulting from *rupture of a varicocele of the ovarian vein*. Dr. Simpson has seen death occur from *rupture of a hepatic abscess* during labor, and another from *peritoneal fissures on the uterus*, from which fatal bleeding took place. Cazeaux points out the danger of death being produced during labor by the *rupture of a large aneurism*. He likewise thinks death may result from the occurrence of severe *hæmoptysis* or *hæmatemesis* during the violent throes of a second stage of labor; and Blundell relates a case of death from hæmorrhage consequent on *rupture of pulmonary vessels*. The same author gives the history of another case of instant death during labor, in which a *post-mortem* examination revealed a *laceration of the right ventricle of the heart*.

*Treatment, especially that which is Preventive.*

1st. We believe in the teaching which Hodge enforces, that the woman should be delivered on the bed on which she is to lie during the puerperal period, which plan avoids the exhaustion, syncope, hæmorrhage, and other evil consequences which may follow her removal from one bed to another after confinement.

2d. Let her also be in the dorsal position at the close of a second stage of labor and afterwards, which, in addition to many other advantages, lessens the probability of air entering the uterus, and hence the uterine veins.

3d. A point suggested by our friend Dr. Hupp we believe an important one—viz., remove all pillows from the head and shoulders immediately after the expulsion of the child, which obviates any tendency to syncope, and may in some cases prevent hæmorrhage, by diminishing the force with which the blood flows to the uterus.

4th. We believe much danger will be prevented by adopting Crede's method in removing the placenta. Even during the expulsion of the child, instruct the nurse to grasp the fundus of the uterus, and follow it down as it contracts, keeping the hand