ketones are excreted via the lungs, oxidized in the tissues, but principally appear in the urine, some as the sodium salts of organic acids. This excretion of sodium, as organic salts, depletes the alkaline reserve of the body.

Carbon dioxide combining power is a measure of the acidosis existing. Determination of the blood ketones, on the other hand, is a direct measure of the disturbance of fat metabolism, and therefore an index of the severity of the underlying metabolic changes.

Death is not correlated with blood sugar, ketones and carbon dioxide combining power. Many patients die although chemically cured. Mental state and the duration of mental symptoms are more reliable prognostic signs.

An intensive study was made of 12 cases of severe diabetic ketosis. All of these received intravenous saline; insulin, 40–50 units per hour until the blood sugar approached normal; intravenous dextrose, 5 per cent, when the blood sugar approached normal, if acetone persisted in the urine. Blood sugar, carbon dioxide combining power, and blood ketones were determined on admission, and every three hours thereafter.

Nine of these patients also received 15–55 grams of sodium bicarbonate intravenously in a 5 per cent solution. They showed an average rise in carbon dioxide combining power which was twice as great as occurred in the patients receiving no sodium bicarbonate. Kussmaul respirations were promptly relieved. There was no effect upon mental state, blood pressure or urinary output. The most unexpected finding was the fact that the blood ketones increased in two thirds of these patients following the administration of bicarbonate, and in the remaining one third, the fall was slower than in the patients who received no bicarbonate. The urinary output of ketones was concomitantly less.

The remaining three patients served as controls, receiving no bicarbonate. They showed a progressive rise in carbon dioxide combining power, and a proportionate fall in blood ketones.

In addition, the records of 154 consecutive cases of severe diabetic ketosis were studied statistically. One third of these received sodium bicarbonate intravenously, with no effect on the mortality rate.

The authors conclude that "There seems to be no practical basis for sodium bicarbonate therapy in the treatment of diabetic ketosis."

R. B. B.

PELNER, LOUIS: *The Value of the "Head-Up" Position for an Infant.* Arch. Pediat. 63: 666–668 (Oct.) 1941.

From an accident to his own 3 months old girl, the author offers a case report and suggests prophylaxis. The baby, four hours after a feeding, was placed flat on her back in bed for a nap. She was in good health and spirits at the time. When next seen she was gasping for breath, lips blue, skin bluish yellow, extremities limp and lifeless. The pulse was weak, rapid and irregular. While the doctor ran to boil up a syringe for injecting epinephrin, the mother snatched up the child by the feet and slapped her vigorously. A thick ropy mucus exuded from the body's mouth and a few minutes later she was her normal self.

From this incident the author draws the conclusion that babies should sleep upon a hard hair stuffed pillow so that if mucus or regurgitation of stomach contents occurs gravity will aid its entrance into the stomach instead of into the lungs. He does not suggest a method of how the child is to stay put upon the pillow, nor does he give his wife due credit for having chosen the better part.

M. H. B.