most important matters connected with diabetes, inasmuch as it is through its instrumentality that the fatal termination of the disease is ordinarily brought about. Sugar, in proportion as it is present in the blood, produces toxic effects of various kinds, which may lead indirectly to death, but it does not, in a direct manner, kill. With regard to the acids belonging to the acetone series, however, the same cannot be said. Their effect in the blood is to interfere with the performance of one of the necessary functions of life.

The continuance of life is dependent upon the elimination of the carbon dioxide produced as a result of vital activity. The sodic carbonate, and, to a certain extent, the sodic phosphate, are the cardinal agents for conveying the carbon dioxide from the tissues to the lungs. If, through any abnormality, there should be an entry of acid into the blood, establishing what is known as a state of acidosis, the alkaline base will be appropriated by it, and thence be prevented contributing to the transport function, as normally designed it should do.

With such circumstances present, and with the acidosis condition growing in intensity, as it will proceed to do, unless it should happen, as where the diabetic state has not attained too advanced a stage, to prove susceptible of being checked, death must sooner or later prove an inevitable result. For vital activity, as for enzyme activity, it is necessary that the products of change should become removed. Their accumulation leads to a stoppage of action, and the issue in connexion with diabetes resolves itself into a question of when the non-removal has attained a sufficient height to reduce the occurrence of action to a point that is no longer consistent with the continuance of life. If, preparatory to this stage being actually reached, a fresh power be given to the blood to take up carbon dioxide, as by the intravenous injection of a sodic carbonate solution or the ingestion of it by the mouth, a speedy restoration of activity temporarily, but unfortunately only more or less temporarily ensues.

The view here detailed was brought forward by me in an article, published in the second volume of the *Lancet* for 1902, entitled "On the Acetone Series of Products in connexion with Diabetic Coma." In this article I state that "writers speak of the altered constitution of the blood by the reduction of its alkalinity as the cause of the coma connected with acidosis and refer the result to the effect of the altered condition of the blood on the tissues of the body. This, however, amounts only to an assertion which gives no insight into the actual pathogeny of the coma." I then open out the view I have mentioned, and in what has preceded, reference is distinctly made to its having been discovered