means may therefore be adopted, and they are particularly suitable for external application. Professor Skoda has for some years employed these means experimentally, and has often seen pleuritic exudations rapidly diminish after the use of mercurial ointment, iodine ointments, iodide of glycerin, and black oxide of copper in the form of ointment. It is self-evident that in all chronic pleuritic effusions the diet must be good, in order as much as possible to counteract their injurious effects upon the system at large.—*Dublin Quart. Jour.*, Aug. 1860, from *Vierteljahrsschrift für die praktische Heilkunde*, 1860, Bd. LXV.

19. *Pathology of Milky Serum*.—Dr. C. T. COOTE, Assistant Physician to the Middlesex Hospital, relates (*Lancet*, Sept. 7th and 15th, 1860) a case of *Piarrhæmia* accompanying acute diabetes mellitus; and draws from a comparison of the facts collected by it the following conclusions:—

1. *Piarrhæmia* consists in an excess of saponifiable fat in the blood, not in the mere liberation of fat from its combinations.

2. The excess of fat in the blood may be the result of two causes—viz:—

(a.) The excessive ingestion of fat (as in *piarrhæmia* during digestion).

(b.) The diminished elimination of the same (as in hibernation and pulmonary diseases).

It is not quite clear to which of these categories alcoholism belongs. It is conceivable that its elements may be *directly* converted into fat by deoxidation; but it seems more probable that the conversion is effected *indirectly*, the hydrocarbon of the alcohol attracting to itself that free oxygen which would otherwise have been employed in the combustion of the fats of the food, and so permitting the accumulation of the latter in the blood.

3. Fat, if directly ingested, may enter the blood with the chyle through the thoracic duct; but it is clear from the present case that it may also be elaborated in, and absorbed directly from, the liver.

4. *Piarrhæmia* is not a *result* of diabetes mellitus, for either may exist without the other. Both seem to be consequences of the same derangement of the functions of the liver which overloads the blood, sometimes with an excess of sugar alone, sometimes with an excess of sugar and fat combined.

Why the liver should deal so differently in different cases with the hydrocarbons submitted to its influence it is hard to say. It seems not improbable that sugar alone is elaborated in the first instance, and that the excess of fat is the result of a deoxidation of this substance; for the conversion of sugar into fatty substances, is not only capable of being effected experimentally (as in the production of butyric acid by fermentation of sugar under the influence of casein), but has been shown to take place in the animal economy, in the formation of wax by bees fed only on sugar.¹

5. The pathology of blood milky from molecular albumen must be considered as still almost wholly negative. It is probably never an independent affection; but neither is it a mere accidental consequence of *piarrhæmia*. Its apparent relation to albuminuria seems to point to some organic change in the constitution of the plasma of the blood itself.

20. *Period of Incubation of Vaccination One Year*.—Dr. HODGES stated to the Obstetrical Society of London (Nov. 7, 1860) that in May, 1854, he had vaccinated a little boy three years of age, but the arm did not rise within the usual period. In the May following, however, a vesicle spontaneously formed, with an areola on the seventh and eighth days, gradually declining on the eleventh or twelfth; a permanent cicatrix, marked by pits, remaining, giving evidence of the genuine vaccine disease.—*Med. Times and Gaz.*, Nov. 17, 1860.

¹ Miller's Chemistry, vol. iii. p. 738.