

vanced. It is not surrounded by any redness or vascularity, and the transition to healthy brain structure is abrupt. Rokitsansky advances very strong objections against the view which refers the causation of yellow softening to the inflammatory process. While disagreeing with Fremy's opinion that it is a regular putrefactive process going on in the brain, he believes that this observer's views of the changes which occur in the chemical constituents of nerve substance during putrefaction, "have given a direction to future investigation which is full of promise." Fremy considers the brain to consist of "cerebric acid, either free or combined with soda and phosphate of lime, of oleo-phosphoric acid, free and in combination with soda, of olein and margarin, of small quantities of oleic and margaric acids, of cholesterine, water, and a substance like white of egg, in the proportion of 7 parts of albumen, 5 of fatty matters, and 80 of water. The oleo-phosphoric acid, which, like the olein, is usually yellow, is very easily acted on, and separates readily under slight influences into phosphoric acid and olein. Thus it decomposes at an ordinary temperature when it comes into contact with water; and decomposing animal matters give rise to a similar change in it. Now, what first occurs in putrefaction of the brain is this decomposition of the oleo-phosphoric acid. But the process does not stop here; for the albuminous matter also decomposing, sets up a further decomposition in the olein, and genuine saponification is the result—a conversion into oleic acid, and a combination of that acid with ammonia. Fremy thinks that this is the process which goes on in softening of the brain—that it is, in fact, a genuine putrefaction of the brain. Although I cannot discover any of the phenomena of putrefaction in the process of yellow softening, yet the liberation of an acid—the phosphoric, and especially one or more of the fatty acids—may be conjectured to be one of the most important phenomena in yellow softening. The conjecture is supported by the very decided acid reaction of the fluid contained in the softened spot." (Op. cit. p.319.) So much, then, for this newly observed condition of yellow softening. And now, *nous revenons a nos moutons*. Hemiplegia with relaxed muscles may occur without loss of consciousness, or with more or less of coma. The former is the result of a sudden rupture of the softened brain fibres, with or without ruptured blood vessels and consequent clot; when a clot exists, it is too small to exercise pressure on the neighboring parts. The latter is also the result of softening and rupture with or without clot. When a clot is present, it must be of large size, or in such situation as to cause pressure on important and central parts of the brain. When a clot is not present the coma is caused by the great extent of the softening. In the treatment of this class of he-