

cal practice was recognised as shock. In this matter it will suffice to allude to the researches of Bergman, Bzerny, Halin, and Fournoy. From the investigations of these writers, fatty embolisms localized in the lungs, or generalized are much more common than is generally supposed, and is produced not only in all fractures, simple or complicated, but further that it may be noticed, although less prominently, outside traumatism in every case where the bones are changed in structure by one cause or another. The number of cases of fatty embolisms observed under the circumstances that we have cited is considerable; it reaches the figure of 140, all, or nearly all have been observed in Germany, except two coming from the Ancient Faculty of Strasburg. Having had opportunity very recently of observing two well marked cases of pulmonary fatty embolism consecutive on osseous changes, we considered it right to publish them, so as to draw attention to a subject little known among us, still less studied, the importance of which nevertheless will not escape the mind of any one, if regard is had to the statistics mentioned above, a subject doubly important in our judgment, not only because it widens the compass of our anatomical and pathological knowledge, but especially because it makes known a nearly fatal complication of serious injuries, and that consequently it appears to us to have in it considerable clinical importance from the point of view of prognosis. On the 28th of October last a young man was brought to the Hotel Dieu, under the service of Dr. Cusco, sixteen years of age, who had his right leg crushed by a tramway. The patient died within an hour of the accident, having lost a certain quantity of blood. His mind continued clear to the last. M. Bruchet house surgeon, made the autopsy, and established the breaking of both bones, at the middle third of the leg with the fissure of the tibia running to the articular plate. He kindly sent me the lungs and heart, the venæ cavæ having been previously ligated, in order to examine the blood of the right ventricle. The microscopical examination made at the laboratory by Professor Vulpian revealed to us the following particulars. The blood of the right ventricle, obtained by means of a puncture made through the wall, previously washed with ether, contained a great quantity of fat mingling in little drops, and recognizable by its micro-chemi-

cal characters, disappearing after the action of ether, and assuming a black coloration under the influence of osmic acid. The vessels of the lung were gorged and literally injected with fat; sections even of the parenchyma made with scissors and examined under the microscope displayed in the interior of the vessels of the lungs—arterial and venous capillaries—elongated masses of from four to five millimetres in length, marked with a special refraction, disappearing under the influence of ether, and presenting, after the action of osmic acid, a deep black discoloration. These floating fat globules, were so abundant at certain points that they outlined, not only the perilobular vascular network, but also the areolar capillary network. Examinations, made at all parts of both lungs gave the same results. The preparations were shown at the Anatomical Society at the sitting of the 8th of November. The second case, not less conclusive than the first, comes from the service of Dr. Brouardel, of St. Antoine. The lungs which we examined, with the assistance of Mr. Mayor, were sent to us by our colleague, M. Marchand, interne of our service. They came from a man who died thirty-six hours after fracture and depression of the right parietal, and as in the foregoing case the pulmonary vessels contained fat, but in small quantities. In both cases, no other viscera than the lungs were examined for fatty embolisms. These two cases which we have reported here, are examples absolutely demonstrative of fatty embolisms after traumatism of the bones. We do not desire in this article, to enquire into the part that this fatty embolism has played in these two cases as a cause of death. In the first, we cannot perceive any other cause that could be assumed. It is, however, a subject that we purpose studying more completely in the future, as cases of fatty embolism are, in truth, very far from rare, and we are persuaded that they will be discovered from day to day to become more frequent, when they are sought for in cases of patients who have succumbed to traumatism. These two cases that we have now reported, are in every particular counterparts of those which have been published in Germany in recent years, and are confirmatory of facts announced by different authors who have devoted their attention to this question; but as we have before said, we have thought it right to publish them in order to draw attention to a subject worthy of study from every