After a few weeks in Bethlem he became brighter, though still silent. He was more clean and easily managed. There were at this time noticed to be some twitchings of the facial muscles.

Dec. 3.—He was shouting and accusing another patient of being a murderer.

Dec. 10.—Since admission he has lost ten pounds in weight; pupils now irregular and unequal. He is restless, constantly pulling at the buttons of his coat.

During the spring and summer of 1887 he remained in a very uninteresting state. He would lie in the arm-chair, taking no notice of anyone or of anything around him. He would eat all that was put into his mouth, but he could do nothing to help himself. At times, if interfered with in any way, he would screech out. He had no local palsies and no fits, but he was generally too weak to stand. He was wet and dirty.

In October severe intractable diarrhœa set in, and he slowly sank and died, without a single gleam of returning reason, on October 18th, 1887.

Post-mortem examination October 21st, weather very cold and dry. Body much wasted; no bedsores or bruises; no special muscular wasting, but both great toes were firmly inverted.

Scalp hairy, calvaria thick, heavy, and dense. Dura mater depressed along middle line by pacchionian bodies. Arachnoid not specially thick, but there were several small lakelets of sub-arachnoid fluid, one at junction of first frontal with ascending frontal convolution on left side. Frontal convolutions were generally much wasted, and there was excess of fluid present. Whole brain weighed 37 ounces, lateral ventricles dilated with fluid.

Grey matter throughout of good colour, rather darker than usual; white matter firm, with numerous puncta. Arteries of brain only slightly atheromatous. No granulations on the floors of the ventricles. Medulla and cord normal to naked-eye appearance. There was slight grey degeneration of the posterior columns in cervical region of cord. No apparent change in lateral columns. Heart firm, small, 8 ounces. Aorta very atheromatous. Kidneys small, normal. Liver 37 ounces, normal; marked acute or chronic changes with degeneration in left lung.

G. H. S.

A Case of Insanity of Adolescence. By John Keay, M.B., Mavisbank Asylum, Edinburgh.

David A., 20 years of age, was admitted into the Crichton Institution on 31st May, 1886.

The history of the case showed that the patient was a medical student of the second year, steady in his habits, a diligent reader, and possessed of considerable ability. No hereditary neurotic tendency could be traced. He had laboured under delusions of

suspicion for nearly a year. He believed that he was followed by men who intended to murder him, and he therefore carried a knife to be used in self-defence. He suspected that his food was drugged and he "heard voices."

The patient, on admission, was pale and thin, but muscular and exceedingly active. His temperature was normal, his pulse good, and his appetite fair. He was depressed, reticent, and suspicious. He was ordered a light but nourishing diet with abundance of milk, and in addition a teaspoonful dose of Parrish's syrup three times a day. His bowels were in good order, and he slept soundly. He played cricket, and took walking and driving exercise.

On the evening of the 3rd June he became excited and demanded to be allowed out, stating that there were people in the place who wished to kill him. His request not being complied with, he attempted to escape, and struggled violently with the attendants. Having been carried to his room and put to bed, he soon became quiet, and afterwards slept well. Next day when walking in the grounds he made several attempts to escape, and these were on other occasions frequently repeated.

During the night of the 8th June he escaped by breaking the iron frame of his window. He was captured and brought back to the asylum on the 10th, but he again succeeded in getting away on the 12th, this time also by smashing the window frame and jumping out. On the 25th, after being absent twelve days, he was brought back. He was thin, but hard and strong, and surprisingly active.

His life now became a continual struggle. His only desire seemed to be to get away. He rushed at windows and doors, and struck, bit, and kicked his attendants in blind fury. When reasoned with he expressed regret, but explained that at times the longing to escape, as he had done before, came upon him with irresistible force.

It is not to be wondered at that signs of failing strength soon appeared. He lost his appetite, which had hitherto been good, and he slept badly. At the end of July a hæmatoma in the left ear appeared, to which a blister was applied with great benefit.

On 9th September it was noted that he continued to lose strength. His appetite had not improved, and morning vomiting became troublesome. He weighed only 87lbs., and showed a loss of 3lb. in as many weeks. The temperature now began to show an evening rise, generally of a degree, or a degree and a half, and the pulse was weak. His diet consisted of eggs and milk, strong beef tea, and alcohol in small doses. The syrup of the phosphates was discontinued, and tonics, gastric sedatives, and digestives were tried in turn. Mentally the condition of the patient was most unsatisfactory. His habits became dirty; the delusions of persecution continued, and he seemed to be sinking into dementia. He was now confined to bed.

On 1st October the patient's head was shaved and a smart blister applied to the scalp. The vomiting was immediately arrested, the appetite increased, and 5½lbs. in weight were gained in a week. Unfortunately

the improvement was not a permanent one. A new difficulty arose in the form of hæmorrhage from the rectum. On examination an abscess was discovered in front of the bowel and ℥ii. of pus were immediately taken from it. Doubtless the patient caused the bleeding by lacerating the rectum with his finger nails. The loss of blood was a serious one. The pulse became small and frequent, temporary retention of urine occurred, vomiting returned, and the evening rise of temperature became well marked.

On the 3rd October an abscess behind the left parotid gland was opened. On the 16th ℥xviii. of pus were removed from a deep burrowing abscess in the right thigh. On the 18th ℥xv. were removed from another in the same region. The right knee became swollen and full of fluid. An abscess of the right parotid had to be opened, and, in fact, almost every day a new collection of pus was discovered in one part of his body or another. It is remarkable that notwithstanding this state of matters the patient gained 7½lbs. in weight in the fortnight ending the 18th. Inequality of the pupils was very frequently noticed, and it was nearly always accompanied by flushing of the left side of the face and neck. Headache, localized a little in front of the left parietal eminence, was constant in greater or less intensity, and there was tenderness on pressure.

A serious difficulty in the treatment of the case from this time was the persistent refusal of food. Six times a day eggs, milk, beef tea, and brandy were administered in small quantities. Forcible feeding by the mouth or nose tended to induce vomiting, and owing to the state of the bowel rectal alimentation, which in other circumstances would have been such a valuable aid, was out of the question. Progressive and rapid loss of weight now took place. The pulse became very weak and rose to 120 per minute, and the evening temperature to 103°.

On the 29th October new openings for the removal of pus were made in the right thigh and right cheek, after which the patient's exhaustion was extreme. On the 31st a large mass of sloughing cellular tissue was removed from one of the abscess cavities in the thigh. On the 2nd November he died.

At the post-mortem examination, held on the following day, the appearances of interest were the following :—

There were recent adhesions on the surfaces of both lungs, the lower lobe of the right lung being firmly adherent to the diaphragm and intensely congested. It weighed 27½oz. When the adhesions were being broken down there was noticed on the right side close to the vertebral column a nodular swelling, soft and fluctuating. This was accidentally punctured and about 8oz. pus escaped. It was evidently an abscess following septic inflammation of the posterior mediastinal glands. The pericardium contained 2oz. straw-coloured fluid. The heart was firmly contracted. The valves were healthy. In the posterior wall close to the branch of the coronary artery in the interventricular sulcus was a small abscess bulging under the pericardium. The right kidney was slightly congested. In the left two

infarcts were found in the cortex, each occupying a superficial area of ¼inch square.

The dura mater was more than usually adherent to the skull cap, especially at the parietal eminences and along the line of the superior longitudinal sinus. The arachnoid surface of the dura mater was found adherent to the surface of the brain along the great longitudinal fissure for about 4½ inches from the vertex backwards, and when these adhesions were broken down small spots of lymph were noticed on the surface of the brain at that part. The brain was soft. The ventricles were not distended. No collection of pus was discovered. The brain, including medulla and cerebellum, weighed 51½oz.

The case here recorded I have regarded as one of Insanity of Adolescence, notwithstanding the many points in which it differs from those usually classed as such. Mental disorder occurring at the period of rapid growth preceding full development generally takes the form of mania. There is exaltation with a great deal of conceit, and the ideas and delusions, if they exist, are of a sexual and religious nature. Such cases exhibit, in a greatly exaggerated and distorted form, the mental state of most people at that period of existence. They are patients capable of causing a great deal of trouble in an asylum. They are subject to relapses, sometimes occurring over and over again; but they generally ultimately recover. In this case there was depression, and it was never varied by a period of exaltation. Melancholic adolescents are, I think, generally unfavourable cases, very subject to suicidal impulses.

D. A. did not seem to have any sexual ideas or delusions whatever. The religious element was present though; he thought he had committed an unpardonable sin and was going to hell.

The case was an unfavourable one from the first. The hallucinations of hearing had existed for a considerable time before admission, and the hæmatoma auris developed when the patient had scarcely been two months under treatment.

The injury to the rectum and possibly the prostate by lacerating with the finger nails was doubtless the starting point of the pyæmia. Curiously enough no rigor was observed, and profuse sweating only once, and these are said always to occur in pyæmia, particularly at its onset.

The post-mortem phenomena were those usually seen in cases of blood poisoning. Changes in the brain are not commonly produced by this disease, and the inflammatory patches and adhesions observed were probably of longer standing and not pyæmic at all.