

they would miss the real matter which would guide them. The narrow palate seemed to him the result of abnormality or arrested development. If, as the investigation seemed to show, the great majority of children had U-shaped palates, were there many with V-shaped palates in the early years of life; and, if so, in conjunction with what deformities, and what was its significance? A consideration of that point might present the matter in a somewhat different light from Dr. Beach's statement of the matter.

Dr. CHANNING, in reply, said he had not examined very many young idiots. Only those in institutions had come within the scope of his investigation; but he found the proportion of U-shaped palates very large among young idiots. It was rather the exception, he thought, to find deformities until they had passed six or eight years of age. That the great majority of cases approximated to the U-shape was a moderately safe conclusion. He agreed that there must be some significance in the development of any organ or in the modification of size or shape of any portion of the body—he should say that with regard to the palate—but he wished to show that there was a good deal of exaggeration on the subject, and that they had gone too far in their conclusions, just as Lombroso had done in classifying insane criminals from a few observations. He did not think he had said that there were as many abnormal palates in normal individuals as in idiots. That would be going further than his warrant. In reply to Dr. Beach, Dr. Channing said that he would not diagnose a case as congenital because the idiot in question had a deformed palate.

---

*On Post-Operative Insanity, with Notes of a Case occurring three weeks after Laparotomy.* By J. CHRISTIAN SIMPSON, M.D., Tunbridge Wells.

The following case may serve the purpose of illustrating a few remarks on the subject of Post-Operative Insanity, which, perhaps, has not received as much attention in this country as might have been expected.

Mrs. L., aged 53, had always enjoyed good health until November, 1893, in which month she began to be troubled with gastric symptoms. These were unsuccessfully treated until the July following, when she asked me to attend her. The family history was unimportant. She was emaciated, and stated that she had been vomiting almost all her food for several months. Tongue coated; bowels constipated. It was evident that the stomach was greatly dilated, and there was pain on firm pressure in the epigastric and right hypochondriac regions. She was first put on a diet of dry food and a small allowance of malted milk; a mixture containing subnitrate of bismuth and hyposulphite of soda was administered. As the vomiting still continued rectal alimentation only was employed for several days. When food was again given by the mouth all the symptoms returned, so gastric lavage was now carried out daily, and, later, every second day. Hæmatemesis occurred, and on 21st August, 1894, she was seen by Mr. Skene Keith in consultation with me. As the emaciation was not extreme we decided to continue rectal enemata and gastric lavage

for some time longer. Mr. Keith again saw her on 11th October, and as there now appeared to be some ill-defined resistance in the right hypochondrium he performed an exploratory laparotomy. The stomach was found to be dilated to below the umbilicus, and a mass of tissue was felt apparently involving or dragging on the pylorus. No attempt at performing gastro-enterostomy was made on account of her bad general condition, but she made a rapid recovery from the operation, and has never been sick since the laparotomy was performed. There was soon marked diminution in the size of the stomach, but some pain on firm pressure in the epigastric region continued.

Twenty-four days after the operation some domestic affairs upset her, and by 9 p.m. she was maniacal, smashing anything she could get hold of. She refused to go to bed, but wanted to go out, and would take no food; her strength was extraordinary. Next morning 125th of a grain of duboisine was injected hypodermically; in a short time she went to bed, and remained peaceful for several hours, though no sleep was induced. This was repeated at 3 p.m., but as no sleep resulted, at 9 p.m. one-third of a grain of morphia was injected. Next day she was still violent and excited, and the attack continued for four days, when she became convalescent, and on the 10th November had no recollection of the excitement, though she still felt her head queer and looked pale and haggard. In April, 1896, she informed me that she had never felt better in her life, and had had no return of the sickness, though the dietary still largely consisted of potatoes.

The occurrence of mental derangement after operation is too frequent to be merely a coincidence. In many cases there is no known hereditary nor acquired neurosis, while in others with a history of hereditary insanity serious operations may be performed without any manifestation of this untoward sequel.

In the first place I exclude operations on the cranium and also certain other known causes of mental disorder, such as anæsthetics, sepsis, uræmia, and other auto-intoxicants. At present I shall allude only to aseptic extra-cranial operations.

The *frequency* of this sequel varies considerably. Homans had only two cases in 1,000 laparatomies, which included 700 ovariectomies and hysterectomies. Werth had two cases in 228 abdominal operations. Schnabel had 12 in 186 ophthalmic operations, while in the Massachusetts Eye and Ear Infirmary only four became insane after 128 operations, though a few more were unstable, restless, and badly behaved at night. Denis, in his thesis, computes the frequency at 2.5 per cent., but this is evidently greatly in excess of

the average. Through the kindness of Professor Annandale I was permitted to examine the clinical records of cases in his wards in the Royal Infirmary, Edinburgh, dating from 1882 to 1894. About 5,500 operations of all kinds had been performed, and there were 10 cases which suffered from mental aberration apparently entirely due to the operation. In a series of nearly 100 cases operated on in my private practice during the past two years the case now reported was the only instance. One other became maniacal during the course of a pelvic cellulitis (*Journal of Mental Science*, July, 1895), but as there was no actual operation it is not included in this series. There were thus 11 distinct cases of mental disorder occurring as a sequel of surgical interference in about 5,600 cases of general surgery. This is a ratio of less than two per 1,000.

The *type* of post-operative insanity which is most usual may be broadly described as acute confusional insanity. But in many recorded cases the actual form of insanity is more definitely stated. Thus in the record of 163 cases which I have collected 67 are described as mania, 45 as melancholia, one as hypochondriasis, two as delusional insanity, 10 as dementia, eight as alcoholic, 24 as acute confusional and hallucinatory, 2 as nymphomania, and 4 as hysteria. It is therefore evident that almost any form of insanity may be a sequel of an operation, but that mania and melancholia are the two forms which are most frequent. After studying 186 cases, Sears remarks that the type in all instances was the acute confusional.

It is now quite decided that true post-operative insanity is entirely different in ætiology, onset, and course from the delirium which may appear after an accident or operation in an alcoholic subject. The latter is simply delirium tremens precipitated by the trauma.

The *age* at which this sequel is most frequent varies considerably. Sears found that in 67 per cent. of 80 cases the average age was 40 years, the actual age varying from 10 to 80. In 32 cases which occurred after ophthalmic operations, Frank-Hochwart found that 15 were of ages varying from 30 to 90, and these suffered from acute confusional insanity. Seven, merely termed "aged," were affected by simple confusion or dementia. In 29 cases of which I have notes the average age is 47·3 years, two being under 40, and the rest varying from 40 to 73. In 17 other cases which were certainly of septic origin the average age was 45·9, and of these six were under 40. Thus no doubt a most important

element is the age, as it may indicate the state of nervous exhaustion and cerebral malnutrition resulting either from atheroma, syphilitic or other diseased condition of the vessels, or from the more normal senile arterial changes.

The *sex*, and coincidentally the *Nature* of the *operation*, are also very important factors. This is shown by the fact that mental disorder is far more frequent after gynæcological than after general or even ophthalmic surgery, but if gynæcological work be excluded the preponderance of the female sex as sufferers in this direction disappears. Sears found that out of 167 cases 102 patients were women, but if strictly gynæcological cases were excluded there was little difference in the distribution of sex affected. He also found that out of 41 cases the subjects of an operation on the eye only 16 were women, and in another series of 18 consecutive cases of insanity after ophthalmic operation 10 were men. In the above series of cases quoted by Sears, 60 were gynæcological, 62 ophthalmic (mostly cataract), and 45 general operations. Kiernan found that of 186 cases 65 were gynæcological and 35 were ophthalmic cases, and Le Dentu noted that in 68 cases 38 had had a gynæcological operation performed. In 124 cases which I have noted 102 were females, and of these 95 were gynæcological, two after other abdominal operations, four general surgical cases, and one an eye case. There were 18 males affected, three with hernia, one with hydrocele, two eye cases, three bladder cases, and the rest general surgical cases. It is notable that in these male cases four were directly and three indirectly connected with the peritoneum, a total of seven out of 18 cases, four of which were on the genito-urinary system. There is probably little doubt that if operations were performed as frequently on the male genital organs as on those of the female, there would be quite as large a proportion of cases of mental disorder after them as in women. This is evident from several cases of mania and dementia having been reported as a sequel to double castration performed with the hope of curing an enlarged prostate. This is all the more likely to be the case on account of the advanced age at which this operation is usually performed. Professor Englisch remarks that though no case of Whyte's died as a result of the operation, there were five who suffered from insanity and died at a later date. Unfortunately Dr. Fauld's experience is by no means so favourable, for he reports five cases that he is cognisant of who all died shortly

after the operation with acute mental symptoms, and Dr. Fleming has also reported another with a similar result.

It may also be observed that it is not only after a major operation that insanity may supervene, for several of the cases were, surgically speaking, trivial and minor cases.

Certain more personal matters in connection with the individual patient may now be considered as exciting or predisposing causes.

*Hereditary tendency* is, perhaps, not so marked as might have been supposed, for Sears found it noted in only 13 out of 60 cases. Probably more important than this actual gross hereditary predisposition is the personal habit of mind and body previous and subsequent to the operation. When this element was taken into consideration it was found that no less than 34 out of 74 cases had been previously "queer, eccentric, hysterical, or nervous." But even hereditary predisposition and bad personal history are sometimes insufficient to cause complete loss of mental equilibrium. This may be exemplified by mentioning the case of a patient of mine operated on by Dr. G. E. Keith. She was in poor condition, eccentric and taciturn, and also had relations mentally afflicted. Her disease was a rapidly-growing ovarian cyst, which weighed 28lbs. after removal. Her convalescence was uninterrupted by any mental sequel. It does not also inevitably follow that mental disorder will be a sequel of one operation because it had been present after a previous one. Ill reports an instance of a woman who had melancholia after an urethral operation, but was quite well after another kind of operation. Contrariwise, one of Le Dentu's cases had had puerperal mania, and was again affected after an operation. This same want of unison in sequelæ may be noted in puerperal insanity, and in the insanity after anæsthetics.

*Alcoholism* is certainly important as an acquired neurosis acting as a predisposing cause, not only of an attack of delirium tremens, which has been excluded in these particular cases, but also of actual insanity. There were 13 cases in the series reported by Sears in which this factor was present. In two it was a family failing, in 11 it was acquired.

A purely *Emotional* disturbance is sometimes sufficient to upset the mental stability, such as in a case reported by Ahsfeld, whose patient became insane after the introduction of a vaginal speculum. Similarly Billroth instanced two

cases that had had a rhinoplastic operation. They became morbidly sensitive, introspective, and melancholic, doubtless due in great part to their deformity and disfigurement.

*Chronic Plumbism* is mentioned by Vene as a possible predisposing cause. I have made inquiries of Dr. Oliver, of Newcastle, and Dr. Richards, late of Hanwell, but neither of these gentlemen could recollect such a sequel. They would be inclined to regard it rather in the light of a coincidence than a case of cause and effect. At the same time plumbism predisposes one to nervous explosions, and Régis believes that in such a case the operation may be the exciting cause of an acute plumbic mania, just as it may also precipitate an attack of delirium tremens. The intimate association of chronic plumbism with arterial and renal degeneration, over and above any actual nervous lesion, must also be taken into account in such a case. It might be well for all plumbic patients who require an operation to undergo when possible a course of medical treatment before having the operation performed.

As regards the occurrence of *Uræmia*, it is necessary to remember that the mere absence of albumen from the urine does not exclude the possibility of serious renal insufficiency. Wilson found that anæsthesia had an effect on this secretion, for he discovered casts after anæsthesia where they were previously absent, and it seemed to him probable that the anæsthetic might be able to provoke, determine, or aggravate an urinary insufficiency. It is therefore advisable in all cases, but more especially those in which the genito-urinary system is the site of operation, to carefully ascertain the amount of urea excreted in the 24 hours, in addition to the testing for the presence of albumen.

There is also the actual *injury done* to various very sensitive and sympathetic structures and organs, such as the peritoneum, and in some cases the actual loss of an organ, secretive or sensory, such as the ovary, thyroid, or eye. Frank-Hochwart gives the following reasons to account for the occurrence of mental disorder more frequently after ophthalmic than after general surgical cases:—(1.) Numerous nerves connect the eye and brain, and lesion of the eye alone occasionally produces psychical affection. (2.) Irritation of any sensory organ is reckoned a possible cause of insanity. (3.) Predisposition due to the depression consequent on the blindness. (4.) Advanced age at which operations for cataract are often performed, though instances of similar

disturbance in younger patients have also been recorded. (5.) Darkness cure is depressing. Some persons get hallucinations on merely closing the eyes, and the longer the darkness the greater the predisposition, though mental disorder may follow operation when no darkness was employed, and even in cases when darkness was used and no operation performed.

The absorption of certain *Antiseptics* has occasionally resulted in the appearance of delirium or mania after operation, and chief among these are carbolic acid and iodoform. Actual poisoning by absorption of carbolic acid from the wound is very rare, and the symptoms are not typical of true post-operative delirium, for carbolic acid acts as a narcotic, chiefly affecting the basal ganglia, the patient dying comatose. Hamilton described such a case in 1873, that of a child, which proved fatal. On the whole this is not an important element, but in the case of iodoform it is somewhat different. This substance is a chemical agent, the composition of which is similar to that of chloroform. It is undoubtedly absorbed in some cases, and in these gives rise to a more or less defined train of mental and bodily symptoms. There is in such cases a taste and smell of the drug in the mouth, coryza, languor, and headache, all of which may be somewhat masked by a mild delirium. In others the delirium is more acute and incoherent, with no rise of temperature, only a dirty, dry tongue. This may appear as soon as absorption seems to have taken place, or not for some little time, in which case it has probably been accumulating. In these latter cases the mental symptoms are more usually tinged with depression. Professor Chiene informs me that he has had two cases of iodoform insanity after operation, and Dr. Clouston considers the excessive incoherency as very typical. As regards the frequency of this as a cause of post-operative insanity, we know from Le Dentu and Werth that in all their cases this antiseptic was most sparingly used, if at all. As a rule in ordinary laparotomy cases it is very little used, but at the same time it is subsequent to those cases that this insanity is most frequent.

Ball noted one case in which he ascribed the mental disorder to the *Morphia*, but as a rule this can be readily excluded, though it might be of grave import if combined with a condition of renal inadequacy.

*Acute Cerebral Anæmia* from hæmorrhage may likewise predispose the patient, also certain *Constitutional* states,

such as the gouty diathesis, the presence of marked atheroma and other arterial degenerations, which all tend to cerebral malnutrition and consequent imperfect stability of the nervous system.

Lastly the patient may have a *Latent Lesion*, which produces no symptoms until something unusual happens such as an accident, operation or alcoholism. The following case occurred in Mr. Annandale's hospital practice. A man had a compound comminuted fracture of the skull, which was accompanied by aphasia. This apparently passed off, but three weeks later the patient indulged in alcohol and was readmitted suffering from pneumonia, and his aphasia was as marked as ever. He was subsequently discharged with no trace of it. Thus a patient may have some weak point in his cerebrum, unknown and unknowable, until it makes itself apparent as an epiphenomenon in such instances. This has also been demonstrated in the lower animals.

There seems to be considerable variation in the time of the *Inception* of the mental symptoms, and also in the mode of their development. In some instances it creeps on gradually as in a puerperal case, and then suddenly manifests itself, while in other cases it appears suddenly with hardly any warning. In the collection of sixty-eight cases by Vene, which included Le Dentu's, the average date of accession was from the second to the fifth day. In 20 cases noted by Denis, only two were delirious immediately after the operation, and in seven cases observed by Dupuytren only one was sudden in its onset. Eillebrown had three patients in whom insanity did not appear until from three to four months after the operation. In Werth's six cases, two occurred after complete recovery from the operation, and two others not until from two to three weeks after the same kind of operation. In 20 cases of my own collecting, there were 13 in whom mental symptoms developed within 16 days, but the average day was the fourth; taking all the cases, which include one which did not appear until six weeks, one at a month, and two at three weeks and over, the average day of the onset was the eleventh. The same observation which is notable in puerperal and post-febrile insanities, is evident in these cases, namely, that the majority of them which begin within a fortnight are acute confusional mania, while those which develop at a later date are of a melancholic or demented



type rather than maniacal. In 86 cases collected by Sears 50 showed symptoms in the first three days, 15 between the 4th and 7th, 14 between the 8th and 14th, four between the 15th and 28th, and three in the second month after operation. These dates are similar to mine, though they are on a larger scale. It is also worthy of note that though the fourth day after the operation was the average date, in a certain number of cases, not necessarily abdominal ones, the insanity did not appear until after the wound had healed, and even in the great majority of abdominal cases there is practically no wound by the fourth day. As regards the possible influence of the anæsthetic in causing this mental state, it is to be expected that if such were the case the symptoms would appear soon after recovering from the anæsthesia or within 24 hours. Savage, however, says that though some cases of chloroform mania develop at once, others do not do so for hours or even days after, and that a fair number exhibit symptoms within a week, either in the direction of marked excitement or unusual depression, and this may be preceded from the first by irritability. It is thus difficult to draw a hard and fast time limit dividing these two classes of cases.

Considerable variation is found in the *duration* and *termination* of post-operative insanity. Vene reports that of his 68 cases, five were incurable or chronic, having then lasted one or more years, 13 were of one to two months' duration, 33 less than one month, six an unknown time, but not fatal, and 11 were fatal. He is therefore of opinion that post-operative delirium is sometimes fatal, rarely chronic, and mostly benign. Sears found that of 91 cases, 54, or 60 per cent. recovered, 21 died, and 16 remained insane. Krafft-Ebing estimates the recovery-rate at 70 per cent., which closely resembles the statistics of puerperal mania. In 15 cases of which I have accurate notes on this point, 10 had an average duration of 11 days, two lasted for two months, one for eight months, and two were more chronic. There were two fatal cases, one on the seventh day after hysterectomy, reported by Swain, and one 28 days after suprapubic cystotomy by Annandale. In five others the duration was not accurately mentioned, but evidently they were not fatal. The actual age does not seem to have so much influence on the recovery-rate as the sex, or rather perhaps the nature of the operation, for Sears found that out of 25 males, 22 recovered, two died, and one remained insane, while out of 64 females, 22 recovered, 17 died, and 15 re-

mained insane. If the case does not terminate fatally, the acute type has a better percentage rate of recovery, and does so sooner than those more tardy in developing, which are as a rule of longer duration and more apt to drift into a chronic state. It may be noted also that the insanity does not by any means always subside on the healing of the wound in those cases in which it appeared before cicatrisation was complete, and this may be compared with the fact previously mentioned, that mental symptoms may appear after cicatrisation is complete. There seems to be no interference with the trophic functions, as the wound almost invariably proceeds satisfactorily, and the absence of any marked increase of the temperature or the pulse rate, such as occurs in cases of septic origin, is one of the distinguishing features of this particular form of acute confusional insanity.

To summarise, in 26 cases of which I have notes, 17 were subjects of mania, only two of these developed after the second week, the average age was 47, nine were females and eight were males; one of the females died. Four were melancholics, one a depressed general paralytic, and four were demented. It seems to me preferable to consider the four melancholia and one general paralytic cases separately from the four dementia cases. In the former the symptoms commenced after a period of two weeks from the operation, the average age was only 41, and the ratio of sexes affected was the converse of the maniacal cases, three being males and two females. One male and one female died. The average age of the dementia cases was 67, the sexes were equally affected and one male died. This greater average age seems to be sufficient to differentiate the more ordinary depressed condition from that of the demented, for while in the former the more slowly developing and slighter mental dissolution appeared at an age less than that of the more rapid and greater dissolution of mania, in dementia, where the greatest dissolution had taken place, the patients were 20 years older than the average age of the maniacal cases, and were presumably the subjects of far more advanced degeneration, hence they more readily succumbed to any nervous or bodily strain which happened to be placed on them.

#### BIBLIOGRAPHY.

*Ahsfeld*, quoted by Vene, p. 47: *Alapi*, Nervous troubles after distension of stricture, Pest. Med. Clin. Presse, '90, xxvi., 79: *Althaus*, Insanity after oophorectomy, B. M. J., ii., '93, 995: *Baldy*, Insanity after gynæcological

operations, *Trans. Amer. Gyn. Soc., Phil.*, '91, xiv., 76-88: *Ball*, quoted by *Vene*, p. 45: *Barwell*, Insanity after ovariectomy, *L.*, i., '85, 522: *Barwell*, Carbolic acid poisoning and mental disturbance, *Clin. Soc. Proc.*, xviii.: *Billroth*, quoted by *Vene*, p. 47: *Birch*, Acute mania after operation, *B. M. J.*, i., '85, 695: *Bryant*, Insanity after ovariectomy, *L.*, i., '85, 522: *Butler-Smythe*, Mania after ovariectomy, *J. Ment. Sc.*, '93, 389-97: Cataract, delirium after, *Med. P. and C.*, i., '90, 539: *Collins*, Insanity after hernia operation, *L.*, ii., '88, 1175: *Davidson*, Insanity after amputation, *L.*, i., '75, 73: *Debove*, quoted by *Luys*, p. 220: *Denis*, Thesis, Montpellier, '89: *Dent*, Traumatic insanity, *Tuke's Dictionary*, and *J. Ment. Sc., Ap.*, '89: *Desnos*, quoted by *Luys*, 221: *Doleris*, Delirium after gynecological operations, *Nouv. Arch. d' Obs. et de Gyn.*, Oct. 25th, '95: *Doran*, Insanity after ovariectomy, *L.*, i., '85, 522: *Dunn*, Insanity after cataract, *Med. P. and C.*, ii., '93, 153: *Dupuytren*, *Leçons orales de Clin. Chirurg.*, '39: *Edis*, Insanity after ovariectomy, *L.*, i., '85, 522: *Éillebrown*, *Amer. J. of Obst.*, Jan., '89: *Englisch*, *Med. P. and C.*, i., '96, 441: *Fauld*, *B. M. J.*, i., '95, 974: *Fleming*, *B. M. J.*, i., '95, 1145: *Frank-Hochwart*, *B. M. J.*, i., '90, 1509: *Gucci*, quoted by *Vene*, p. 13: *Hamilton*, *B. M. J.*, i., '73, 226: *Homans*, quoted by *Sears*: *Ill*, quoted by *Vene*, p. 10: Insanity after operation, *St. Bart.'s Reports and Med. P. and C.*, i., '94, 126: *Jones*, Insanity after ovariectomy, *L.*, i., '85, 639: *Keith*, Insanity after hysterectomy, *B. M. J.*, i., '89, 1284: *Kiernan*, *Med. P. and C.*, ii., '93, 68: *Krafft-Ebing*, quoted by *Sears*: *Le Dentu*, *Med. Moderne*, No. 491: *Luys*, *Revue Obst. et Gyn.*, No. 8, '93: *Lyll*, Insanity after operation for entropion, *Chinese Med. Miss. J.*, '89, iii., 92: *MacFarland*, Relation of operative gynecology to insanity, *Medical Review*, *St. Louis*, '93, xxvii., 443-5: *Massachusetts Eye and Ear Infirmary*, quoted by *Sears*: *Matison*, Influence of cocaine, quoted by *Vene*, p. 44: *Meredith*, Insanity after ovariectomy, *L.*, i., '85, 522: Neurosis after oophorectomy, *B. M. S.*, i., '93, 3: *Norman*, *B. M. J.*, i., '90, 1486: *Paget*, Mania after operation, *Illust. Med. J.*, i., '89, 154; *L.*, ii., '67, 220: *Reclus*, Influence of cocaine, quoted by *Vene*, p. 45: *Régis*, *B. M. S.*, ii., '93, 74: *Gaz. de Med. de Paris*, '93, viii., s. ii., 481-4, and *Manual of Mental Medicine*: *Rendu*, quoted by *Luys*, p. 221: *Richards*, Insanity after oophorectomy, *B. M. J.*, ii., '93, 995: *Rohé*, Mental disease after gynecological operations, *New York Med. J.*, lviii., 437-9: *Rossignol*, Influence of iodoform, quoted by *Vene*, p. 46: *Savage*, *B. M. J.*, ii., '87, 507, 1199: *Schnabel*, quoted by *Sears*: *Sears*, *Boston Med. and Surg. J.*, '93, 642; *Med. P. and C.*, ii., '93, 68: *Sheppard*, *Amer. J. of Mental Sc.*, '88: *Swain*, *B. M. J.*, ii., '94, 120: *Tait*, *Lawson*, *B. M. J.*, ii., 89, 497: *Tuke*, Insanity after gas, *B. M. J.*, ii., '87, 507: *Vene*, *Délires post-opératoires*, Paris, '91: *Weber*, 25 cases, Zurich, '91, F. Lohbauer: *Werth*, quoted by *Vene*, p. 39: *Wiglesworth*, Insanity after ether, *B. M. J.*, ii., '87, 507: *Wilson*, quoted by *Vene*, p. 54: *Wyeth*, Mental symptoms after suprapubic drainage, *Annals of Surgery*, *Phil.*, '93, xvii., 65-7.

*On Mental Auto-infection.* By H. KORNFIELD, M.D., Corresponding Member of the Medico-Psychological Association, Grottkau, Silesia.

In popular estimation there is no surer relief from itching than by scratching. The lower classes have no better remedy for anger than cursing. The more educated indulge in reproaches and complaints often referring to other causes than the immediate source of irritation. Experience, however, has taught us that, in only too many instances, the practices thus indulged in are positively deleterious; and that