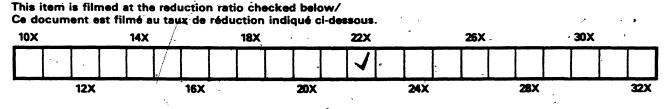
Technical and Bibliographic Notes/Notes techniques et bibliographiques

The	Institute	has atte	mpted	to obt	ain the bes	st
oriai	nal copy	availabl	e for fi	lmina.	Features o	f this
· •				· · · · ·	ly unique,	
		Iter any	•			
		•		-	cantly cha	nae
•		-	•	-	hecked bei	-

L'Institut a microfilmé le meilleur exemplaire
qu'il lui a été possible de se procurer. Les détails
de cet exemplaire qui sont peut-être uniques du
point de vue bibliographique, qui peuvent modifier
une image reproduite, ou qui peuvent exiger une
modification dans la méthode normale de filmage
sont indiqués ci-dessous.

			<u>.</u>	
Coloured covers/ Couverture de couleur	· · · ·		Coloured pages/ Pages de couleur	Orig
Covers damaged/ Couverture endommagée			Pages damaged/ Pages endommagées	the sion othe
Covers restored and/or lan Couverture restaurée et/ou			Pages restored and/or laminated/ Pages restaurées et/ou pelliculées	first sion or il
Cover title missing/	que		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées	
Colodred maps/ Cartes géographiques en c	ouleur		Pages detached/ Pages détachées	The shal TIN
Coloured ink (i.e. other tha Encre de couleur (i.e. autre			Showthrough/ Transparence	whic
Coloured plates and/or illu Planches et/ou illustrations			Quality of print varies/ Qualité inégale de l'impression	diffe enti (begi
Bound with other material, Relié avec d'autres docume			Includes supplementary material/ Comprend du matériel supplémentaire	righ requ met
Tight binding may cause s along interior margin/ La reliure serrée peut caus			Only edition available/ Seule édition disponible	· · ·
Blank leaves added during appear within the text. Wh have been omitted from fil Il se peut que certaines pa lors d'une restauration app	rge intérieure restoration may nenever possible, these Iming/ lges blanches ajoutées		Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/ Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à	
mais, lorsque cela était po pas été filmées.		-	obtenir la meilleure image possible.	

Additional comments:/ Commentaires supplémentaires:



The to the

The poss of th filmi

The Unofficial Gynæcological Treatment of the Insane in British Columbia.

Complete 1

By Ernest Hall, M. D. Fellow of the British typecological Society, Victoria, B. C.

Reprint from Medical Sentinel, December, 1900

•

× 9

*

a .

MEDICAL SENTINEL.

The Unofficial Gynæcological Treatment of the Insane in British Columbia.

By Ernest Hall, M. D.

Fellow of the British typecological Society, Victoria, B. C.

My first attempt in Gynecological treatment of the insane was made on January 5, 1896, with such re-



markable results that I have lost no opportunity of investigation in this direction. A l t h o u g h the work has not yielded the almost incredible results that were evinced by my first few cases.

ERNEST HALL, . D. first few cases, they have been fairly satisfactory, and sufficiently encouraging to justify the effort and to stimulate a more systematic and thorough investigation into the relations which exist between pathological conditions of the pelvic organs and abnormal psychic phenomena.

My examinations comprise 98 cases, and my operations 33 of these. Forty-two examinations and 24 operations were in British Clumbia, and to these I shall confine my remarks.

None of these patients presented indications of assymetry of features. Amentia was not present, neither high arched palate, irregular ears, defects of speech, deafness, chorea strabismus waverings of eyes or twitching of facial muscles. In

cases operated upon no hereditary taint was obtainable.

The preliminary examination was first conducted under anesthesia, but latterly this was as much as possible dispensed with, using it only for violent cases. It has been my practice to open the abdomen only when external examination revealed disease, but a more extended experience leads me to consider intra-abdominal examination an essential part if there be indications pointing in that direction, with an absence of determinable disease elsewhere. With modern methods such an. examination should have no mortality, and but a few weeks confinement, and surely a disease that would remove a patient from friends and society perhaps for life justifies such careful investigation.

Results. Out of the forty-two cases examined in British Columbia, but two presented normal pelvic organs, these two were unmarried. Of the twenty-three cases placed under treatment all but two had been married. Of the married ones all but three had borne children, and these three had salpingitic adhesions, giving evidence of former pelvic inflamation.

Of the different conditions found I report only such as pathological that in the opinion of the ablest authorities are capable of producing in those whose mental powers are intact, local pain, discomfort, or general systematic disturbance. Perineal laceration was present in five cases, cervical laceration in six cases. Retroversion with adhesions in seven and simple retroversion in three cases. Adhesions of the clitoris was noted but once, while salpingitic and ovarian adhesions were found in ten cases. Cystic ovaries varying from slight enlargement to that of a naval orange were found in eight cases, and par-ovarian cyst in one case. Varicocele of broad ligament plexus was found in four cases, and uterine fungoids in one. By far the greatest number in any class being that of the inflammatory class. Next in order appears cystic disease of the ovaries.

Of the mental results I can report eight recoveries and one more all but cured, one very much improved, two slightly improved, one improving, with the satisfaction that, so far as I know, none have been rendered any worse by the treatment.

Of the results physically, all had normal convalescence from the operations but two, one had suppuration in the wound and one died eleven days after the operation, the postmortem showing acute cerebral congestion with a slight focus of suppuration at seat of ligature. One case died of/basal meningitis nine weeks after/the operation; wound had healed and nurse discharged at the usual period.

The duration of the insanity in those who recovered averaged but ten an one-half months, while in those who were not improved, it averaged twenty-four months. In those whose insanity continued less than one year with the exception of the two deaths already referred to, all but one recovered. This is what we should expect, it proves nothing, but suggests prompt action.

It has been stated that the human organism is a complexity of delicately poised reflexes, but it is more than this since there exists the power of origination and direction of action, and to a limited extent that of inhibiting reflex action.

This something which controls we call the Ego. To the extent that the Ego directs the activities and controls the reflexes, to that extent is the ideal human life exhibited. The ideal life as distinct from that of the mere animal is exhibited only when the activities of the organism are less the result of reflex action than those resulting from the direction and domination of the Ego. So long as the organic structure is intact, so long as the system is free from disease, so long are the reflexes normal; but with a diseased periphery nerve tract or center, we expect abnormal reflex results. When this diseased arc is confined those parts of the body to which are not intimately concerned ° in psychic phenomena, we have but abnormal physical reflex, as evinced in the exaggerated knee jerk of lateral sclerosis, but if the reflex arc includes the basal ganglia whose function is to exhibit psychic reflex, and if there be organic disease at any point in the continuity of the arc, then we must expect abnormal psychic reflex. The exaggerated knee jerk we call a symptom of physical disease, but we call the abnormal psychic result insanity, while in reality it also is a symptom of physical disease, differing from the former only as the functions of the parts diseased are different.

As the Ego can realize that exaggeration or absence of the knee reflex is abnormal so also it is capable to a limited extent/of recognizing abnormal psychic/reflex.

In the early stages of mental disease hallunciation is conspicuous in which the patient is still conscious of the unrealty of the psychic reflex, the second, delusions, in which the Ego has been limited and clouded,

but yet exerts a measure of mental control, the third definite insanity in which the Ego has been completely subjugated by the intensity of abnormal reflexes. Insanity is the psychic sum of physical abnormali-The focus of irritation may ties. be in any of the large ganglia or at the periphery of the sympathetic system in any of the large cavities, or in fact wherever nervous tissue is found.

I. To recapituate we may conclude that insanity exists when the Ego is dominated and controlled by the influence from a diseased periphery nerve tract or center.

2. Since disease is subject to variation of intensity, a patient may oscillate between sanity and insanity as the Ego dominates and controls the organism inhibiting abnormal psychic reflex or is dominated and controlled by the intensity of such reflexes.

3. Since the intensity or degree of the abnormal psychic action is the measure of the sum of the physical abnormalities, the removal of a small part of the physical disease might result in the restoration of the balance of power to such an organism and diminish if not remove the abnormal psychic phenomena.

With gradually increasing а knowledge of pelvic pathology we realize that the sacrifice of normal tissue is by no means necessary. With methmodern ods resection of cystic ovaries in part is preferred to the sacrifice of the organ as was formerly practiced. It is very rarely that the whole of both ovaries is removed. Nothing is more certain that the removal of healthy organs contributes in no possible manner to a restoration of the mental health. The pelvis in these cases must be subjected to the

same treatment that would be given a patient whose mental condition is not in question. The abnormal local condition and that only is to occupy the attention of the operator.

The post-operative treatment of these cases differs little from that of ordinary abdominal cases: Occassionally a patient requires to be bound to the bed, but in the vast majority of cases the nurse can control the patient's actions with but little trouble. The selection of the nurse is a matter of no little importance. She should be strong in mind and body, and possess sufficient tact to enable her to cope with, conquer and indication dispel the slightest of return former to abhabits normal thought of or expression. An additional nurse is required to take alternate duty.

These patients as a rule are anaemic. As soon as the digestive system is in proper condition they are placed upon an easily assimilated ferruginous tonic. Regular evacuations and blood rich in haemoglobin are the best eliminators of ptomaines with which the tissues have been saturated during years of impaired function and systemic depression.

The old proverb, Mens Sana in Corpore Sano, has long been recognized as standard of normal health. But how close is the relation between the Mens and Corpus? It may be more intimate than many of us have yet even dreamed. Certain it is that **2**3 investigation into the physical realm are continued, startling facts are being constantly brought to light concerning the very intimate relation between the psychic and the physical. Is it not more than probable that we are just here

treading the border lands of a new world? Surely what we already know, though dimly, of the correspondence between the mental and the physical is sufficient to convince us that there are yet great discoveries to be made along that line. And let us not overlook the fact that to the active physician belongs the duty of zealous investigation in that direction. In fact he must be to the forefront in the scientific investigation of these opening problems or he will become the butt of ridicule for those whom he, in his complacent self-sufficiency, is inclined to designate as quacks and religious cranks, and for their increasing number of sympathizers among thoughtful people.

Prof. Foster tells us that "changes in what we call the body, bring about changes in what we call the mind." Demonstration is unnecessary to show that the sexual system, while in direct sympathetic connection with other organs, has also a unique connection with the psychical, nor to trace the relationship between a given psychological state and that of local pelvic congestion, and the channel through which this is made possible is the same channel through which a local pelvic irritation may produce abnormal cerebral activity with disordered cortical function, giving rise to and indicated by abnormal mentality. These influences from peripheral irritations of the sexual organs may at times be inhibited by a strong mentality, but they may, if severe and persistent, eventually overcome the strongest subjective effort. Given a certain environment of a strongly sexual character in a robust person, certain alterations of form and function follow in response to such stimuli in spite

of effort of the will to the contrary.

To obviate the result the environment, or stimuli, which may be purely psychical, must be removed. Now, if such stimuli, not necessarily objective, are sufficient to produce organic change in defiance to the will, so may a local pelvic irritation or stimulus, acting upon the higher nervous centers cause abnormal psychical actionalso in defiance to will power, to cease only when the abnormal environment or peripheral irritation is removed. This is illustrated in the experience of my first case, who after her recovery gave me a somewhat detailed history of periods of her insane life, stating that she experienced and recognized within herself a force totally distinct from herself which compelled her to speak and act directly against her better judgement. This force, formerly called Satanic, is but the unconquerable abnormal psychical reflex from a sensitive and diseased periphery, and the patient vacillates between reason and insanity, as the force is subservient to and dominated by the will, or becomes the ruling power in the organism.

With this conception of insanity comes a new responsibility, especially to those who had formerly, considered its developement the limits of their medical jurisdiction. We must now consider insanity but the indications of a serious physical lesion, demanding the utmost care and skill on the part of the attendant to discover, to determine and to treat such lesion. At times such disease may be easily found, but frequently and unfortunately it will elude his grasp. To consign to the asylum without giving the patient the benefit of modern therapeutics is unjust to the patient and

cruel to the friends. To be sick may be unfortunate, but it is not necessarily a disgrace, neither should the occurrence of insanity in one member of a family be the instance of casting reflection, but so long as such erroneous conception exists in the public mind we cannot be too careful in this matter. To those in whose family this affliction has fallen, and who live in perpetual dread lest through some mysterious visitation that they also may become victims, we can bring hope, assuring them that the conception of "mental disease" as distinct from physical lesion has passed away, that insanity is not the result of some vague demoniacal influence, nor the indication of disfavor upon the part of an offended Diety, but the direct result of physical disease, and only follows where physical degeneracy leads.

And to our femalc patients, who, under the burden of life's duties, and oppressed by its sorrows, harrassed by the customs of Society and irritated by disease, whose mentality at times indicates the result of constant peripheral irritation, whose reflexes refuse to submit to subjective guidance and become temporarily dominant, and who reasonably look to us for relief, what shall we say? Is asylum life with its unpleasant associations, its stone walls, iron bars and uniformed keepers, the atmosphere calculated to restore jaded nerves, to recuperate a weared body and remove local disease? On the contrary admitting the utmost kindness on the part of those in charge, is not such an invironment comparatively as irritating to a sensitive nature as her local disease is abnormal? Only after all methods have been exhausted and not until

then, should we permit our patients to be removed to the care of the state. Let us look at this matter fairly, and if necessary in the concrete. In view of what has been acomplished in the modern treatment of insanity, and in view of the true conception of insanity, how would you or I act with regard to those who are nearest to us in ties of affection? Let us consider such symptoms as formerly but fingerposts pointing to the asylum, as indications for the necessity of closer examination and more skillful treatment, remembering that every case committed is a painful admission upon our part of inability to locate or remove the physical disease. If such care were habitually exercised, the asylum commitments would be appreciably less.

However satisfactory it may be to report recovery after the removal of physical disease, it is not to be compared to that experience when we also have restoration of the mental. To remove physical disease and at the same time to minister to minds diseased is the highest ideal of surgery.

It has been urged that disease of the genital organs in women cannot be a prolific cause of insanity, and the reason offered for the statement is because the ratio between the male and female insane is about equal. Have the causes of insanity among the males been determined, and has it ever been shown that disease of these parts is not a factor in its production? Are not these organs undistinguishable in their early embryological developement? Are not the nerve and blood supply analogous? Are not the ravages of disease in the parts recognized by well known lesions, and may there not vet be much to be learned in this

particular field? Again, who are the men who largely recruit the asylum ranks? Are they not the young men who in the period of functional activity have excelled in abuse of their sexual system? We shut our eves to this too often. The excessive waste of highly vitalized fluids, with its acompanying exhaustion, the inflammatory conditions, acute and chronic, which are the product of the gonococcus, to say nothing of the grosser pathological results, absesses, strictures, etc. Must nature bear this outrage without revenge? Our asylum reports state self abuse as a cause of insanity in a certain proportion of cases. When an elongated and constricted prepuce, adhesions and retained secretions are a recognized cause of nervous disturbances in male children, it is but reasonable to suppose that undue irritation and exhaustion may cause the most nervous disturbance in grave adults; but when we have added to this conditon one of specific infection, with all its train of results, it is within the limits of the probable that one cause of insanity in the male may be analogous to that in the female, and if the cause, then it follows that the treatment should be as direct as radical.

Lest any careless reader or superficial observer, whose thoughts follow but beaten tracks, and whose memory hovers over "mutilating operations upon the insane," "wholesale mutilation of helpless lunatics," and other absurd phrases, might conclude that it is within the meaning of this paper that the cause of insanity among women is found alone in diseased pelvic organs, or that surgical measures are advocated as a panecea for mental abnormality, we wish to emphasize that

no such erroneous conception exists upon the part of the writer or in the minds of those who have appeared before the public as workers in this department. But one thing we do believe and shall advocate so long as there are additional worlds of conservatism to conquer: That the principals of surgery and humanity unite in demanding that the insane receive at least the measures of consideration and treatment that their diseases call for; that these hapless sufferers from pelvic diseases have extended to them the benefits of modern treatment, and that our insane mothers, sisters and wives receive treatment equally skillful to that given in daily practice by hundreds of our educated physicians. If this be done a small per cent of the asylum population may be sent to their homes, households united, family ties restored, and given "beauty for ashes, the oil of joy for mourning, and the garment of praise for the spirit of heaviness." This is no idle dream, no strain of imagination, but a fact in our city. What has been done here can be repeated in any City in Canada. It is an opportune moment, in view of the evidence submitted, for the profession to unite in this new crusade and extend to these unfortunate invalids the measures of mercy that an enlightened sentiment desires and the spirit of justice demands.

In order not to prolong this paper I will give a brief history of but a few of the cases:

Case 1. Mrs. —, a former patient, aged 35, of excellent family history, no hereditary taint, had been committed to the Provincial asylum during my absence in Europe. She had enjoyed excellent health until, after attending to

a lit-the the m the iemed wing, oundlowed , now whom g the ie not me of s life iyond that spoke fould. ysical be-td ef-the anied d re-, and z her g to rea-self. . mar-story y hissome years t and ment level-ed to ted a inder periwalls, xampera-iends t unie abocele i calegen-

3

5

Table of Cases Operated Upon in British Columbia

	• Mental Condition.	History of Physical Disease.	Physical Condition found upon Physical Examination.	•	Treatment.	*
No.	· · · · · · · · · · · · · · · · · · ·			,		Physical.
1.	Three years insane; at times vio- lent mania	Absent	Cystic prolapsed and adherent ovaries.		Double salpingo-ovariotomy	Perfect result. Gai
2.	Melancholia for one and a half years	Severe back aches for six months	Ruptured perineum, varicocele of pelvic plexus.		Curettage and double salpingo-ovari-	pounds
3.	Religious delusions for three years; also suicidal mania	Ovaritis fifteen years ago	Retroversion with dense adhe- sions.		otomy	Normal
6.	Melancholia for two months; relig- ious mania one month		Adherent appendages.	0.	ing of adhesions; ventrofixation	Normal Recovered from
8.	Hystero-mania recurrent; one at-		Adherent appendages, cystic ovaries.	6.	Double salpingo-ovariotomy	tion; died from ingitis nine
11.	tack lasting six weeks Melancholia for one month		Perineal rupture, tubo-ovarian adhesion.	8.	Amputation of cervix, removal of cystic ovary and ventrofixation	after Normal
13.	Pre-menstrual mania with delusions fifteen months	Absent	Perineal rupture, enlarged uter- us with adhesions.	11.	Vaginal ovariotomy	
	,	Pain in back and	Pelvic varicocele, adherent cir-	13.	Double salpingo-ovariotomy	Normal
	Delusions for three weeks Mania and delusions with melancholia	side since last child. "Caught cold" after	Retroversion, with adhesions,	14.	Curetted, removed right and resected left ovary	Normal
17	one year Dementia of six years' duration		Salpingitis. Rupture perineum, prolapsed	16.	Amputation cervix, double salpingo- ovariotomy	Suppurating in dominal wound
			ovary. Cirrhotic ovaries with adhe-	18.	Curetted, double salpingo-ovariotomy	Normal
19. 21.	Mania with delusions two years Melancholia ten years' duration		sions.	19.	Amputation of cervix, curetted, re- moved right appendage and left tube	Normal
24.	Melancholia, suicidal mania,		Cystic ovary, retroversion, with	21.	Double ovariotomy	Normal
28.	Melancholia, with delusions, for two	•	aunesions.	24.	Curetted, trachelorrhaphy, double salpingo-ovariotomy	
	y cars	Pelvic discomfort for	Rupture perineum, salpingitic	. 26.	Curetted, double salpingo-ovariotomy	Normal
	Delusions, with mania four years	years	adnesions.	28.	Removal of appendages	Normal
64.	Melancholia and delusions four years	Absent	Rupture perineum and cervix, retroversion with adhesion, piles.	63.	Amputation of cervix, ventrofixa- tion	Normal
6.	Delusions, menstrual mania siz	Absent	sion, varicocele, rungolus.	64.	Curreted, ligation of veins, ventrofix- ation	Normal
67.	Mania, with melancholia, three months.	· pelvic pain	and adherent appendages.	65.	Curetted, removed right ovary and left appendage	Normal
6 8.	Delusions and mania, three years	· Childbirth	Rupture cervix.	67.	Curetted, trachelorrophy	Normal
69.	Delusions occurring occasionally		Rupture cervix, ovarian cyst.		Removed one ovary restricted other	
77.	Intermittent melancholia	Pelvic pain, hemorr	Enlarged uterus, endometritis.		vaginal hysterectomy	Normal
76.	Mental confusion, inability to at tend to household duties; melan	Dysmenorrhoea and	Enlarged, prolapsed and adher- ent ovary, salpingitic adhe-		Removed right appendage, restricted left ovary Removed right appendage, restricted	Normal
73.	cholia intermittently Religious mania and delusions two	0	Retroversion with adhesions,	18.	left ovary; curetted, resection of ovaries, ventrofixation	Normal
	years	"Fervic pain Ior years.	ent ovary. Cervical polypus, retroversion,	73.	Removal of cervical polypus	Normal
	· ·	Absent	cystic ovaries.			

÷.,

Results.

Physical.	Mental.
t result. Gain of 35 ids	Recovered within 18 days.
al	Improved.
al	Recovered within 21 days.
ered from opera- ; died from men- tis nine weeks r	Unimproved.
al	Recovered.
al	Died.
al	Recovered.
al	Unimproved.
urating in ab- inal wound	Improved for a time, relapsed.
al	Unimproved.
al	Very much improved.
al	Unimproved.
al al	Recovered.
al	Unimproved.
a.ı	
al	Unimproved.
al	Recovered.
al,	 Slight_improvement.
al	Slight improvement.
al	Recovered.
al	Recovered.
al	Improving.
al	IInimproved
Gul	Unimproved.
	· · · · ·

part the asyl you func abus shut exce fluic hau: tion the say ogic etc. with port insa . case con: reta cau mal to s exh gra adu to t fect . it i: able mal the it for be a L per. foll met ope "wi lun: mig mea of i alou that cate mai •

ć

CARRIER CARLES STREET CARTER -

her houshold duties and acting as nurse to her two children she became considerably debili-This, with the shock of tated. her younger child's sudden death, precipitated intermittent melancholia lasting eight months. Symtoms of pronounced insanity with suicidal tendancy developed. After a months treatment under the care of a nurse she was committed to the Provincial hospital for the insane, April 1st, 1895, where she remained until January 3rd, 1898. During this period she was at times violent, would attempt to scratch and bite her attendents, exhibited a most obstinate disposition, was considered by the late matron as one of the worst cases, and by the authorities as hopeless. No encouragement was given as to her recovery. The patient was placed under chloroform and a pelvic examination made. The right ligament was thickened, left ovary prolapsed, uterus fixed, and perineum partially ruptured. Upon this data I recommended operative measures.

Right ovary was Operation. found cystic with tubal adhesions, left ovary adherent in cul-de-sac, fimbriated extremity closed. The appendages were removed, uterus also curetted. The operation was brief and practically bloodless; postoperative history normal; stitches removed on the twelfth day. The mental condition remained unchanged for some days. She persisted in sitting up in bed, tearing the bedclothes, and endeavoring to bite and scratch the nurses. It was necessary to tie her hands on either side of the bed, and place a heavy bandage over the lower part of the body. Upon the fourteenth day after the operation she became calm and recognized her mother. On the

following day she conversed a little and appeared to appreciate the kindness of her nurses. Upon the seventeenth day the patient seemed more rational, did a little sewing, and took an interest in her surroundings. The following day I allowed her to see her little daughter, now a bright girl of eleven years, whom she had not seen since entering the asylum. The meeting was one not soon to be forgotten; it was one of those periods in a physicians life when his remuneration is beyond computation, an experience that lives. The patient acted and spoke as only a reasonable mother could. Day after day, as the physical strength increased, the mind became capable of more extended effort. Thirty-five days after the operation the nurse accompanied the patient to her home and remained with her a few days, and today the patient is managing her own household and attending to her social duties with all the reason and energy of her former self.

Case 2. Mrs. C., aged 57; married; several children; no history of imflammatory action; family history excellent; experienced some financial troubles; for several years has suffered from pain in back and pelvis, and underwent treatment without relief. Melancholia developed, when she was committed to the asylum where she remained a vear. Examination made under anesthesia showed lacerated perineum and laxity of the vaginal walls, but nothing else. Upon this examination I did not recommend operation. After conference with friends who desired nothing to be left undone, I concluded to explore the abdomen, and found large varicocele of both broad ligaments with calcareous deposits and cystic degeneration of the pelvic peritoneum. Appendages were removed with as much of broad ligament as possible.

Post-operative history normal, physical condition much improved, mental condition considerably better, so much so that she is managed at home, and takes an interest in domestic affairs. Does considerable sewing for grandchildren, and, in fact, is much better that we expected.

Case 3. Mrs. R., aged 52; no children. Had an attack of ovaritis fifteen years ago. Examination showed retroversion and general pelvic adhesions, insanity of a suicidal and religious type. She was in the asylum for three years. Operation October 8th, showed adhesons of the clitoris, retention of the smegma, universal pelvic adhesions; removed left appendage, failed to find right ovary on account of dense adhesions, replaced womb. Insanity was completely cured and physical condition improved.

Case 14. Mrs. D., age 27; one child six years old, not pregnant since, convalesence from confinement slow, has not been strong since, had delusions of her husband trying to poison her; would frequently wander from home and be found in houses of acquaintances in different parts of the city. Exwithout anæthesia amination showed retroversion with adhesions; condition of appendages could not be made out.

Operation: Right ovary con tained cyst the size of a walnut, was removed with its tube, also left tube removed, adhesion broken up. Convalesence normal, left hospital on 18th day. For a week after returning to her home had occasional desire to get up and go out without her clothes on, but since one month from operation has been perfectly normal mentally with the exception of two occasions for a few days previous to menstruation when she had a return of delusions.

Case 24. Miss H, age 18. For several months had acted in an excitable and strange manner, worse during menstruation. For three weeks before I saw her had manifested decided mania, at times suicidal.

Previous history. Had an attack of typhoid fever with inflammation of the bowels four years ago, complained of pain in right side, increased by walking. Had leucorrhoea.

Examination: No hymen. Retroversion with adhesions, right ovary enlarged, general salpingitic adhesions, profuse leucorrhoea.

Operative treatment: March 7th. Removed appendages with exception of part of right ovary, small par-ovarian cyst, also removed elongated and congested appendix.

Result: Better for two days after operation, worse again, but improved and at the end of four weeks was perfectly sound physically and mentally.

Case 65. Mrs. — Never pregnant. For six years complained of pain in side. For several years she suffered from mental confusion previous to and during menstruation. Became worse, would throw away her clothing, would scream loudly, threaten suicide, etc. She had passed through the usual ordeal of treatment for misplacement, etc., Examination showed masses etc. upon both sides of the uterus with dense adhesions. Right ovary enlarged, cystic and containing mass of hard blood clot size of marble. Left ovary enlarged, stroma de-

stroyed. Tubes disorganized by inflammaton, universal adhesions. Convalescence normal. Mental recovery.

Case 77. Mrs. — aged 27; two children. For fifteen years suffered from pain in right side, worse the week following menstruation. Pain frequently excruciating. Local treatment gave relief only temporarily. For two years suffered from intermittent melancholia.

Examination showed enlarged, prolapsed and inflamed ovary with adhesions.

Operation. Removal of right appendage and restriction of left ovary.

Perfect recovery, physically and mentally.

Case 78. Mrs. —, aged 23, two children. Complained of "womb trouble" for several years with severe backache and headache. For last few years she would become mentally confused, would forget herself while engaged in domestic duties, and would be unable to continue the household work. Coupled with this were periods of melancholia.

Examination showed ruptured perineum and retroversion with adhesions,

Operation. Right ovary enlarged and cystic removed, left ovary cystic, resected, varicocele of veins litigated in two place and ventrofixation performed. Is progressing favorably, but too recent to report. These last two might fitly be called borderland cases, as they could hardly be included as coming wholly under the classification suggested. Nevertheless they are evidently examples of the class from which the demented ranks are not unfrequently recruited and who require our most careful consideration.

Conclusions: (1.) That the prevalence of diseases of the pelvic organs, and the absence of any other determinable organic disease in many patients who manifest psvchic abnormality, coupled with the fact that in a by no means small percentage of cases the removal of the pelvic disease is followed by a rapid return to the normal mental condition, justly lead us to the conclusion that between pelvic diseases and mental abberration there exists some correlation, but as to its exact definition we cannot vet speak.

(2.) That in all cases of mental abnormality in both sexes which develop from the advent of puberty onwards, the condition of the pelvic organs with their functions should be made a matter of searching enquiry.

(3.) That whenever possible : before committment to the hospital for the insane, the pelvic organs should be examined and if any abnormal conditions be found such condition should receive appropriate treatment.

(4.) That gynæcological treatment should be recognized as a most important part of asylum therapeutics.