THE

BULLETIN

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The Vancouver Medical Association

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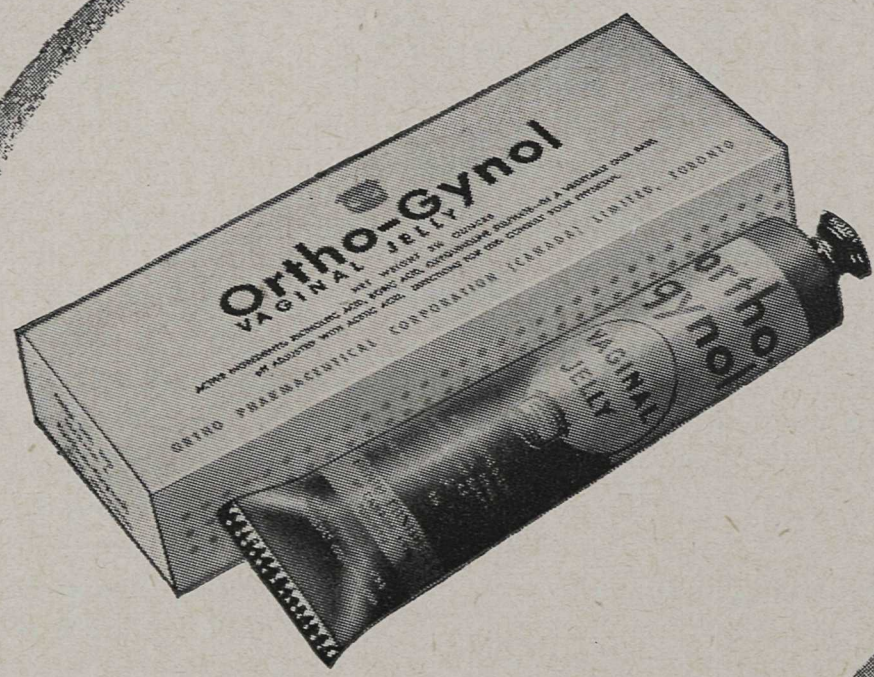

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Programme for Fiftieth Annual Session

(Spring Session)

February 17th CLINICAL MEETING—St. Paul's Hospital, Nurses' Auditorium.

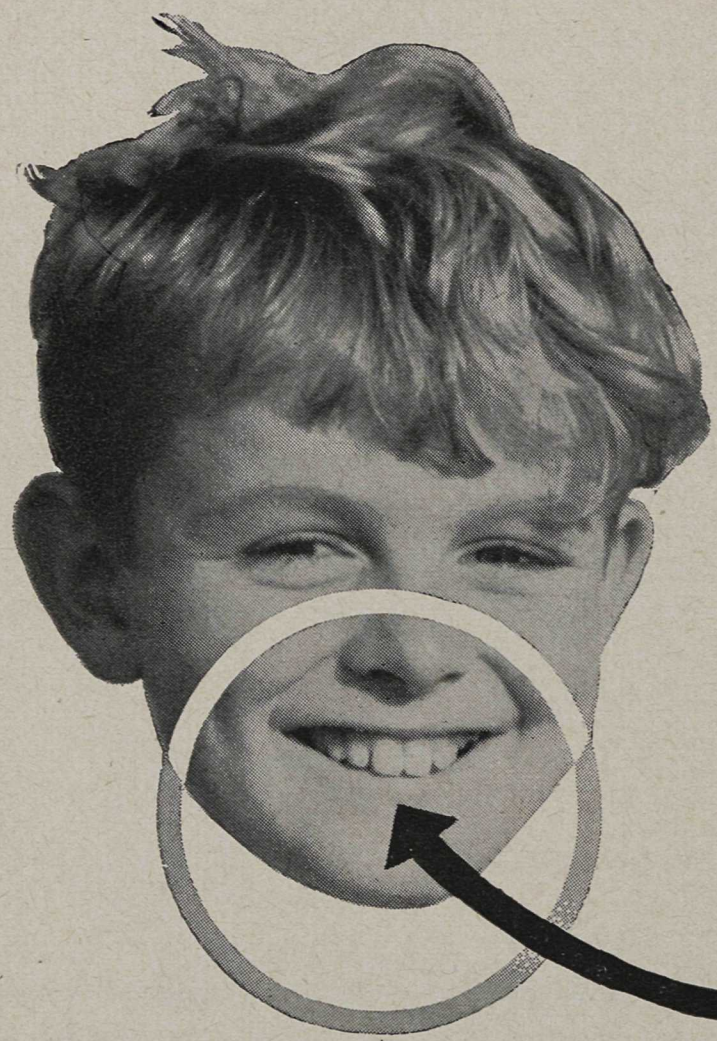
March 5th (Friday) OSLER DINNER AND LECTURE—Hotel Vancouver, Banquet Room.
Osler Lecturer—Dr. Murray Blair.

March 16th CLINICAL MEETING—Children's Hospital.

April 6th GENERAL MEETING—Auditorium, Medical-Dental Building.
Speaker—to be announced.

April 20th CLINICAL MEETING—Place of meeting to be announced.

May 4th ANNUAL MEETING—Auditorium, Medical-Dental Building.



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1. Leicester, H. M.: J. Am. Dent. A. **33**:1004 (Aug.) 1946.
2. Strean, L. P., and Beaudet, J. P.: New York State J. Med. **45**:2183 (Oct. 15) 1945.

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VANCOUVER HEALTH DEPARTMENT

CASES OF COMMUNICABLE DISEASE REPORTED IN THE CITY

STATISTICS—NOVEMBER, 1947

Total Population—Estimated	339,350
Chinese Population—Estimated	5,980
Hindu Population—Estimated	118

	Number	Rate Per 1000 Population
Total deaths	400	14.3
Chinese deaths	17	34.6
Deaths, residents only	378	13.1
BIRTH REGISTRATIONS:		
Male	407	
Female	377	
	784	28.1

INFANT MORTALITY:	November, 1947	December, 1947
Deaths under 1 year of age	15	17
Death rate per 1000 live births	25.5	19.7
Stillbirths (not included above)	7	10

CASES OF COMMUNICABLE DISEASE REPORTED IN THE CITY

	November, 1947		December, 1947	
	Cases	Deaths	Cases	Deaths
Scarlet Fever	8	0	12	0
Diphtheria	1	0	1	0
Diphtheria Carrier	0	0	0	0
Chicken Pox	25	0	36	0
Measles	98	0	61	0
Rubella	3	0	7	0
Mumps	21	0	27	0
Whooping Cough	3	0	8	0
Typhoid Fever	2	1	0	1
Typhoid Fever Carrier	1	0	0	0
Undulant Fever	5	0	2	0
Poliomyelitis	0	0	0	0
Tuberculosis	45	15	54	13
Erysipelas	6	0	5	0
Meningococcus (Meningitis)	2	2	1	1
Infectious Jaundice	0	0	0	0
Salmonellosis	1	0	1	0
Salmonellosis (Carrier)	0	0	0	0
Dysentery	1	0	0	1
Dysentery (Carriers)	0	0	0	0
Tetanus	0	0	0	0
Syphilis	65	0	0	4
Gonorrhœa	218	0	0	0
Cancer (Reportable):				
Resident	94	0	97	0
Non-Resident	14	0	44	0

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CONNAUGHT MEDICAL RESEARCH LABORATORIES
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The Editor's Page

It cannot be denied that medical science and the art of medicine have made outstanding progress in the last fifty years. Our knowledge of disease, its causes, diagnosis and treatment, have advanced more rapidly in that time than in the hundred years preceding. Our hospitals are miracles of efficiency, and daily thousands of lives are saved or prolonged, and suffering mitigated or dispelled, where fifty years ago, patients suffering from the same diseases were doomed to an inevitable death.

Another department of medical practice in which great advances have been made, is the training of nurses. The fully-trained nurse of today is a highly-skilled, technically expert woman, equipped to undertake procedures of which her predecessor of fifty years ago had never heard, and for which she recived no training—anaesthetics, intravenous therapy, intricate surgical and medical techniques, and so on. Without her skilled help and trained knowledge, much of modern medicine and surgery would be impossible.

This is all excellent, and as it should be. But there is a big question mark which faces us, and grows ever more demanding of an answer: and it is "what of the patient?" What of the sick man or woman of today, who needs medical and nursing care? And especially the latter?

It reminds us of a well-known book on Hospital Management that was published some years ago; on its front cover were printed the five functions of a hospital. Briefly, they were as follows: First, to be a health centre for the community; second, to train and educate doctors; third, to train and educate nurses. The fourth has slipped our mind—but we remember very vividly that the fifth and last was "To take care of the sick."

There is a moral in this, and one that we would do well to consider. All medical science, all nursing, all our advances in knowledge, have, really, only one justification, and that is "To take care of the sick." All the other considerations are very important, but they are secondary, as far as the practising doctor and nurse are concerned. But we are losing sight of the first consideration, the patient. It is becoming increasingly difficult for the sick man to obtain medical care that he can afford—hospital costs are rocketing out of sight—a special nurse can hardly be found when he needs her—hospitals cannot staff their wards.

Where is this all going to end? And is it not time that all concerned got together, and made an earnest effort to find an answer to this very serious question?

Let us consider for a moment the nursing shortage. A very thoughtful and very provocative article, published in a weekly known as the Commonweal, has recently come to our attention—and it contains so much that must appeal to everyone who has thought of this problem, that we feel it might be worth while to give a brief resume of it. It is called "The Nurse and the Specialist" and is written by E. M. Bluestone, the Director of Montefiore Hospital, New York. Whether Dr., Mr., Mrs. or Miss, we do not know—but that does not matter.

This writer brings out clearly one or two facts. One is, that while "We are told by the statisticians in the nursing profession, that we are graduating more nurses than ever before," this is really a misleading statement. There are two things a graduate in nursing can do—one of them is bedside nursing. In Bluestone's opinion, this is the only activity that can be called "nursing," and we shall probably agree. The other activity is specialisation by one who has had a three-year nursing training. She may specialise in a hundred different ways, but she has ceased to be a "nurse."

It is the shortage in nurses (bedside nurses) that is serious. As to why nurses give up nursing, to become laboratory, operating-room, industrial, public health, executive, etc., specialists, there are probably a great many good reasons, economic security, special

adaptability, and so on. Perhaps these are not impossible of solution—one very potent cause is the lack of security that faces the bedside nurse. The author says of this nurse "At her best she is a necessity, and that is why we want enough of them to go around when the need is genuine. In fact, we ought to have a surplus, and should be willing to pay for it through some form of unemployment insurance. It would be difficult to find a profession that is more worthy of the benefits of social security than the profession of nursing."

Would this be enough? The author does not think so—He or (she) thinks that there are additional and deeper reasons. "After a certain point is passed, the more professional and the more educated the nurse, the less desirable she becomes at the bedside. We have now before us the paradox of nurses who are too good for bedside nursing. Do we need, and can we afford, a highly educated registered nurse for the sick on all occasions?"

We *must* have bedside nurses: who can and will nurse, well and efficiently, the sick patient. Have we set our sights too high, in our curriculum of training for nurses? Do we, by our high standards or pre-training education, lose a great deal of competent, excellent nursing material? Is our training curriculum too advanced or complicated? (eight or ten lectures each in neurology, psychiatry and the like?) This writer thinks so, and suggests some degree of lowering of academic requirements before training, revision of curricula, additional types of training, shorter and devoted entirely to training for bedside nursing, and so on. This would staff our sick rooms and supply bedside nursing in sufficient amount, without interfering with those who wish to take the more advanced course, and at the end of them specialize in one of the many directions which our highly specialised age has opened up. The writer ends:

"Our nurse-training programme, noble in conception though they have undoubtedly been, have in actual practice overshot the mark and defeated our ends. We must try again while benefiting from the mistakes of the past."

LIBRARY NOTES

HOURS—

Monday, Wednesday and Friday	9.00 a.m. to 9.30 p.m.
Tuesday and Friday	9.00 a.m. to 5.00 p.m.
Saturday	9.00 a.m. to 1.00 p.m.

RECENT ACCESSIONS TO LIBRARY—

Transactions of the American Association of Genito-Urinary Surgeons.

Medical Annual, 1947.

Progress in Neurology and Psychiatry, Vol. I, 1946, and Vol. II, 1947, Edited by E. A. Spiegel.

Gifford's Textbook of Ophthalmology, 4th ed., 1947, by Francis H. Adler.

Concepts and Problems of Psychotherapy, 1947, by Leland E. Hinsie.

Psychosurgery, 1942, by Walter Freeman and James W. Watts.

Their Mothers' Sons, 1946, by Edward A. Strecker.

Our Age of Unreason, 1942, by Franz Alexander.

A Textbook of Clinical Neurology, 6th ed., 1947, by Israel S. Wechsler.

Disease of the Nervous System, 5th ed., 1947, by F. M. R. Walshe.

An Introduction to Dermatology, 11th ed., 1947, by Walker and Percival.

CORRESPONDENCE

Editor,
Vancouver Medical Association Bulletin,
925 Georgie St. W.,
Vancouver, B.C.

The Vancouver General Hospital is desirous of announcing to the medical profession that the Pediatric service in our Outpatients Department has been extended. I would appreciate therefore, if you would give the following announcement publicity for the next issue of the Bulletin.

"The Childrens Outpatient Department of the Vancouver General Hospital has been expanded greatly in the past few months and patients may be referred for consultation *daily* by appointment. Clinic hours begin at 9.00 a.m.

"A fully qualified and experienced Pediatrician is in attendance each day at this time and it is intended that the system of giving written reports to practitioners on their patients shall be greatly extended."

Thank you very much for your consideration of this request and with kind personal regards.

Yours sincerely,
R. A. Seymour, M.D.,
Asst. Director Medical.

The Editor,
Bulletin of the Vancouver Medical Association,
925 West Georgia Street,
Vancouver, B.C.

Dear Sir:

The Metropolitan Health Committee, School Health Division, has underway a survey to study the problem of obesity in children. This will be an attempt to arrive at conclusions regarding the causative factor in each case, be it glandular, poor food habits, etc.

May we through the medium of your bulletin, request the assistance and co-operation of the practitioners of the district. When definite information is gained, it will be made available to all who are interested. The plan of the survey is outlined as follows:

1. Students included will be those who are 30% or more overweight according to the height and weight standards of Wood. There are approximately 500 students in the survey to date. Two hundred of these will be plotted in retrospect on the Wetzel Grid in an endeavour to get more information regarding the first tendency towards obesity. If this proves profitable, grids will be obtained for the total number of students.

2. The study will include a physical examination, and a thorough inquiry into the dietary habits, familial background and socio-economic status.

Since a complete physical examinations is not possible with the facilities at our disposal and since we do not undertake any treatment, many of these children will be referred to their private physician for these. The majority of them are probably already attending the doctor.

In every case where a private physician is named, he or she will be contacted by the School Medical Officer. It would be of great assistance if the doctor will make his findings available to us. On the other hand, it is possible that we can assist in the treatment of the case in our follow-up. We have on our staff a well-trained nutritionist, who is taking an active part in the study. If the doctor will indicate the caloric intake which has been prescribed, she will outline a well-balanced diet designed for the individual.

It is planned to follow as many of these students as possible for a number of years, in order that results of treatment may be assessed. In some cases of overeating an emo-

tional problem exists, and these students will be referred to the Mental Hygienist on our staff.

Thanking you for your co-operation in printing this, I remain

Yours truly,
Stewart Murray, M.D., D.P.H.,
Senior Medical Health Officer.

Publication of the B.C. Formulary has now been completed and copies are available for distribution to the medical and pharmaceutical professions. The bulletin was prepared by a point committee of the B.C. Medical Association and the B.C. Pharmaceutical Association, and the publication has been financed by the latter group. Copies can be secured on application to the new offices of the Pharmaceutical Association, 310 Dominion Bank Building, 207 West Hastings Street, Vancouver.

The provincial social assistance authorities, as well as municipal authorities in many parts of British Columbia, have issued official advice that prescribing for patients in receipt of social assistance or pensions must in future be confined to the B.C. Formulary unless special authority has been secured for prescribing elsewhere. Pharmacists throughout British Columbia have been advised by the provincial social assistance authorities and by the majority of municipal authorities that their accounts will not be paid where it is shown they have dispensed prescriptions outside the B.C. Formulary.

The following is part of a letter received from Mr. F. H. Fullerton, Manager of the B.C. Pharmaceutical Association of B.C.:

"I know this point is a contentious one but on the other hand our own members are faced with the alternative of either turning down descriptions or knowing they will not be paid for them if they fill them, and therefore, from their point of view it is most desirable that as many medical men as possible should know that the new Formulary is available."

ANNUAL SESSION
BRITISH COLUMBIA SURGICAL SOCIETY
March 18th and 19th, 1948

The Session will be held in the Vancouver Hotel.

Guest Speaker—Dr. R. M. Janes, Professor of Surgery, University of Toronto.

There will be a series of sixteen, twenty-minute papers, followed by discussion of a wide range of surgical subjects, including general gynaecology, thoracic, orthopaedic and urological branches of surgery.

All scientific sessions are open to the members of the medical profession at large. **Every practitioner will be made most welcome.**

A limited number of rooms have been reserved at the Hotel Vancouver for out-of-town visitors. These may be had by direct application to the Hotel.

Registration fee for the session is $5.00.

Vancouver Medical Association

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DUODENAL ILEUS (WILKIE'S SYNDROME) ARTERIO-MESENTERIC ILEUS

F. W. GRAUER, M.D.

Presented May 27, 1947

This syndrome has to do with extrinsic obstruction of the third portion of the duodenum in the region of the superior mesenteric vessels. Bloodgood was one of the first to recognize the condition *postmortem*. Stavely, also of Johns Hopkins, did the first duodeno-jejunostomy for this condition in the first decade of this century.

The pathological background in the great majority of instances is related to a failure of proper development of the mesentric attachments of the small and large bowels to the posterior abdominal wall. This permits a hypermobile ptotic condition in which the weight of the bowel is suspended by the superior mesenteric vessels and their branches rather than the mesenteric leaves themselves. As a result the third part of the duodenum becomes compressed between the aorta and spine posteriorly and the uperior mesenteric vessels anteriorly.

In addition to this purely mechanical situation there may be developmental bands, adhesions and in some cases an acquired pathological lesion such as lymph node enlargement at the root of the mesentery giving rise to obstructive symptomatology.

Wilkie's classical description of the symptomatology has associated his name with this syndrome. "The patient is usually a female of somewhat spare build and of a visceroptotic type. She gives a history of stomach trouble for many years, usually since childhood. She will state that she has always had to be careful of what she ate, otherwise she suffered from epigastric pain and flatulence. Periodically she has had 'bilious attacks', with nausea and vomiting. At the age of thirty or thereabouts the symptoms become aggravated. Epigastric discomfort and flatulence follow all but the simplest of meals. Walking and standing aggravate these symptoms; rest in bed gives a certain amount of relief. In addition to the chronic flatulent dyspepsia so suggestive of a biliary condition they suffer from what they term their 'attacks'. These are the typical popular bilious attacks consisting of first a day of headache and nausea and epigastric discomfort, sometimes amounting to actual pain; this is followed by vomiting, first clear, then bilious. This may last for a whole day, after which the patient feels completely relieved, although relatives remark that she looks hollow-eyed and has a tinge of jaundice. Such attacks tend to recur at intervals of from four to five weeks, and are ushered in by constipation. In a few cases the nausea, headache, lassitude and epigrastric pain are the most pronounced symptoms, and vomiting is an occasional late symptom. In such cases it would appear that a tonic pylorus resists the duodenal tension until at last it gives way, bile regurgitates, is vomited, and relief is obtained. The persistence of such symptoms over a prolonged period is apt to lead to a state bordering on, if not actually of, neurasthenia, when the subjective symptoms complained of multiply by analysis and make diagnosis more difficult."

The present case has to do with an example of an acquired type of dynamic duodenal ileus. For brevity only the positive findings in the case history will be presented.

The patient is a white female, aged 30, married and has one child born in 1945. She was admitted on April 4, 1947.

Complaints: A feeling of fullness in the upper abdomen after meals for the past four years. Gas pains, fatigue and weight loss for the past year. Nausea and vomiting after larger meals on several occasions, associated with constipation since December, 1946.

H. P. I.: The patient was never one to enjoy robust health. About four years ago she began to suffer from a feeling of fullness in the epigastrium as though her stomach was not emptying. This would occur after even a very small meal, and when the meal was large she would develop nausea and vomiting of undigested food prefaced by crampy pains in the epigastrium. These attacks have become progressively worse. There has been no haematemesis. Her appetite has remained good but unsatisfied.

Past History: This patient has suffered from ill health since infancy. She was born in 1917, was breast fed for a short time, was unable to nurse from a bottle and took cow's milk from a cup. She had frequent vomiting and diarrhœa with light colored stools which were bulky. Her abdomen was large and buttocks wasted up to about the age of 6 years. This history is very suggestive of cœliac disease. At the age of 6½ years she had a ruptured appendix which was treated by drainage only. She became very ill until the age of 8. At 9 years she had her appendix removed. At the age of 10 an incisional hernia was repaired. During these years little food seemed to agree with her and she became a nutritional problem. She had intermittent bouts of constipation and diarrhœa until the age of 16. At the age of 18 her menses began with a heavy flow and irregularity which aggravated her anæmia. She had a miscarriage at the age of 25 years.

Physical Examination: The patient is a fair complexioned, pale, lean female of slight build. Her best weight was 155 pounds four years ago. Her present weight is 100 pounds. The B.P. is 110/75.

Abdomen: The abdomen is scaphoid and soft. There is mild tenderness under the right rectus above the umbilicus. There is no muscle splinting. The liver and spleen are not palpable and there is no gall-bladder tenderness. There is a small soft palpable mass in the mid-line at the level of the pancreas gland. This could be the pancreas itself. Otherwise examination of the abdomen including rectal and pelvic, is negative.

Laboratory: R.B.C. 3,800,000, Hb 80%, W.B.C. 6000, 56% polys, 38% lymphs, 6% monos.

Fasting blood sugar 75 mgm%.

Gastric analysis Free HCl 5, Total 15 in 3 hours.

Urinalysis—normal.

G. I. X-ray series. This showed dilation of the second and third portions of the duodenum with spasm of the first portion. There was a definite hold-up of barium at the approximate site of the superior mesenteric vessels. This appeared to be an extrinsic stenosis of the third part of the duodenum. At operation on April 10, 1947, the gall-bladder was normal, there were no adhesions related to her previous operation. The peritoneum throughout had a peculiar slimy consistency. On raising the transverse colon, the pancreas was of normal size but appeared a muddy gray color. The greater omentum was quite atrophic and shrivelled to a small thin mass along with antimesenteric border of the transverse colon. At the root of the superior mesenteric vessels was an aggregation of small pink soft lymph nodes embedded in fibrous connective tissue which gave bulk to the root of the mesentery as it crossed in front of the duodenum. There were no enlarged nodes elsewhere in the small bowel mesentery. The bowel itself appeared normal except for a pale slightly thickened slimy serosa.

Duodeno-jejunostomy was carried out bringing the first loop of jejunum to the right side in front of the superior mesenteric vessels and joining it to the mobilized portion of the third part of the duodenum to the right of the said vessels by lateral anastomosis.

Follow Up: The patient has had no further attacks of crampy epigastric pain with nausea and vomiting. She is able to take a normal sized meal without discomfort. She has some gas which is probably related to her low stomach acid.

Perhaps the most important single test for this condition is the X-ray finding of stenosis and dilatation of the duodenum. Remembering that the pathological sequence of partial obstruction is first increased peristalsis, then hypertrophy and finally dilatation, the finding of the latter justifies exploration and a short-circuiting operation.

TREATMENT OF CARCINOMA OF THE BREAST WITH TESTOSTERONE THERAPY

By W. M. TOONE, M.D., F.R.C.S., Edin.

(Read before the North Shore Medical Society, November, 1947.)

I was stimulated to enquire into the treatment of carcinoma of the breast with testosterone when atending Sir John Fraser's Clinic in Edinburgh. This method of attack on carcinoma of the breast follows a line suggested by Herbst in Estrogenic Therapy of Prostatic Carcinoma. It is thought that control of glandular structures by sex hormones is lost and carcinoma results. In this regard Mrs. Dawson has pointed out that the curve of incidence of cancer of the breast is closely similar to the curve of incidence of the menopause and concludes that a co-relation exists between the two. It has been demonstrated that in a certain group, X-ray therapy has brought about a considerable improvement. In this proportion of cases it was thought that by giving testosterone the patient would be swung still more to the male side and that the temporary effect produced by ovarian irradiation might be converted into a more permanent effect.

This work began in March, 1946, when I selected twelve cases which came to me in practice. Ten of these cases had had radical mastectomies and there were two in which the tumour remained. The last case followed died recently and so my report has been delayed. All patients were given X-ray radiation to the ovaries. I have given 25 mgm of testostone (Perandren) twice weekly.

Mrs. M.—age 58. Radical mastectomy 1945, glandular and bone metastasis. This patient had excruciating pain from bone metastasis and had morphine gr i frequently during the day. After testosterone therapy her pain subsided, indeed she rarely had to have morphine, her appetite improved and she died two months after treatment began, in comparative ease.

Mrs. McW.—age 62. Radical mastectomy 1945. Glandular metastasis with severe brachial neuritis. Pain much less severe—this patient died three months after onset of testosterone therapy.

Mrs. A.—age 55. Radical mastectomy 1944, large ulcerating lesion from X-ray burns. Glandular metastasis. No improvement noted. Patient died two months after therapy.

Mrs. I.—age 64. Radical mastectomy 1944. Bone and glandular metastasis. Pain very severe. This was almost completely relieved by therapy. Patient died five months after treatment started.

Mrs. S.—age 52. Radical mastectomy glandular metastasis. It was noted that the glands diminished greatly in size and in some areas disappeared. This patient who was going downhill rapidly lived for six months after therapy was initiated. The glands did not return and she had a peaceful end.

Mrs. C.—age 56. Bone and glandular metastasis following radical mastectomy in 1943. Considerable pain in lumbar region. Pain markedly relieved but patient died two months after therapy started.

Mrs. C.—age 80. Ulcerating scirrhous type of carcinoma. The ulcer healed completely. Patient died of pneumonia ten months after having testosterone therapy.

Mrs. F.—age 60. Radical mastectomy 1944. Glandular metastasis, considerable brachial neuritis. Pain relieved—patient died two months after therapy was initiated.

Miss C.—age 54. Radical mastectomy 1944. Glandular metastasis. No improvement with therapy.

Mrs. T.—age 49. Radical mastectomy 1944. Glandular and bone metastasis. Bedridden when seen and having considerable pain. Patient was able to sit in chair, and pain was relieved after treatment. Patient died in ten weeks in comparative ease.

Mrs. M.—age 57. Radical mastectomy 1943 with glandular metastasis. Considerable improvement seen in general condition but died two months after treatment.

The twelfth case proved to be very interesting. Treatment started in May, 1946, and the patient died in October, 1947. This patient was 62 years of age and had had a history of ulcerating breast since 1937. The ulcer was a deep suppurating wound two hands' breadth in size covering the left breast and going into the axilla. There were numerous palpable glands of both axillae, supra and infra-clavicular regions and many nodules of the skin. There was a tremendous oedema of the left arm, the patient being unable to use the left shoulder. She had complete paralysis of the lower limbs with incontinence of urine and faeces. Section taken at the edge of the ulcer proved it to be an adeno-carcinoma and X-ray of the spine showed metastasis with collapse in the lower dorsal region. Three months after the start of therapy the dirty ulcerating breast was completely healed. Nodules in the skin disappeared and nearly all the many glandular secondaries ceased to be palpated. Function of the limbs slowly returned and the patient regained control of the sphincters. She was able to sit up in a chair for the first time in two years. The voice became male in character and she was forced to shave her beard. This improvement continued over a period of 14 months when she gradually started to go down. Paralysis returned and she died 18 months after her first treatment.

Conclusions:

(1) In patients with metastasis from carcinoma of the breast testosterone therapy combined with ovarian radiation alleviates pain considerably, especially in those who have done bone metastasis.

(2) This treatment appeared to have hastened the end rather than prolonged life, but the last days were more tolerable.

(3) It was not successful for cure in any case, although one patient lived 18 months, and her breast tumour and secondaries disappeared. It may be that the benefit is obtained because although testosterone is essentially an androgen it can also produce an oestrogenic effect.

(4) I believe this form of treatment does produce an improvement but it is generally only temporary in nature. It may well be used in the last stages of the disease for relief of distressing symptoms and a more peaceful ending.

My grateful thanks are due to Ciba and Company who furnished the testosterone to carry out this treatment.

References:

1. Personal Communication from Sir John Fraser.
2. Personal Communication from Dr. R. McWhirter.
Radiologist Royal Infirmary, Edinburgh.

British Columbia Medical Association

(Canadian Medical Association, Britsih Columbia Division)

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TREATMENT OF PSYCHONEUROSIS IN GENERAL PRACTICE

By V. GORESKY, M.D., Castlegar, B.C.

The attached paper will be of great interest to the general profession of B.C. and we are grateful to Dr. Goresky for offering it to us for publication. It will, no doubt, excite considerable discussion.—Ed.

On finding that psycho neurotic patients with* and without** somatic disease could densensitize themselves with help in two to five days, I began to investigate the matter and used the following technique:

1. First, a rapport is established with the patient in a sitting position facing the desk. All discussion is carried on in a friendly, personal manner, talking to the patient on his own level as a personal friend and not as a superior. After rapport is thoroughly established, a complete psychiatric history, especially with reference to all repressions, is obtained. He is asked to tell about all unpleasant factors in his past and present life, especially those experiences that he does not like to think about and tries to push away or "forget" when the memory of them is recalled. Two hours or more are spent in eliciting all unpleasant details. If one or two factors are held back it is immaterial as they will be desensitized automatically along with the rest when he begins to feel improvement.

2. The patient is then told to go home and relive mentally and recall all past unpleasant memories in every detail. He is asked to do this four to five times a day for four to five days and then come back. He is also told how to correct any interpersonal or environmental factors present; that is, how to solve any family disturbances or problems in connection with his wife, husband, children or in-laws. Financial and occupational problems are also discussed and suggestions made. The marital partner is then called in and interpersonal factors explained and he or she is told what to do to provide a relaxing environment for the patient, and how to rule out in-law relationships or other interpersonal relationships. Every factor, and how to take care of it, is worked out in detail. In repressed experiences, the exact experiences are pointed out and how to desensitize them is explained. In environmental factors, each one is pointed out and the solution as to how best to carry it out is suggested. The exact wording to use so that no one is hurt, or is hurt as little as possible, is suggested to the patient. The solution provided must always be such that he will see that no one near and dear to him has his feelings hurt. For this reason the exact wording or phrasing must be suggested to him. If it is found that he is unwilling to do the "painless surgery," the physician must do it himself, seeing his wife and explaning what

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** Patients without somatic disease are those with mental symptoms only.

* Patients with somatic disease have both mental and physical symptoms or physical disease.

is necessary The choice of language is very important. The most personal question asked in one way, in a certain tone of voice, might be resented but if worded differently it does not bother the patient. For instance, if a female patient is asked if she is jealous of her husband and "nags him," she will deny it indignantly. If asked if she is hyperattached to and possessive with her husband, and feels she cannot share his love with anybody else, even his mother or children, that is quite readily admitted. The husband and wife are warned not to hurt each other's feelings, and if they have done so to make it up at once regardless of who is at fault.

In four to five days the patient usually comes back with conflicts, misconceptions, obsessive reactions and most other mental and physical symptoms gone. Even migraines and hysterical paralyses are relieved partially or completely. If the symptoms have not cleared up, or are not clearing up in that period, the trouble is usually in environmental or interpersonal factors. These are then examined in detail for the damaging factors. In patients with poor insight, past unpleasant factors give a clue as to the present difficulties by acting as sensitizations to them. These are located. Using the patient's somatic reactions as a check, they are gradually brought up to the patient's conscious mind in such a way that their logic is irresistible to him. His own feelings tell him it is right.

Another method often used with a patient with high resistance is to get him to relax and think back over his life, and to use especially that period between sleeping and waking to examine any thoughts which come up spontaneously. If they give a somatic or psychic reaction, then he is told to desensitize these experiences also by going over them four to five times a day for four to five days.

The patient is then instructed to keep going over all repressed material for the six weeks that emotional re-education is carried on. He is frequently checked up on. After the first ten days or so, he can reduce the number of repetitions of desensitizing to two a day and progressively lessen the number of times he goes over the repressed material. Finally, desensitizing once a week may be all that is necessary. After the first week, repressive factors do not cause any reaction.

For adjustment in environmental factors, a basic unit of father, mother, children and the occupations and problems of each is used. A psychoneurotic in a home often causes chain reactions such as peptic ulcer or hypertension in the marital partner, or bed wetting or bronchial asthma in children. These were treated by adjusting family relationships and cleaned up in most cases.

Many patients who "could not carry on another day" were within four days able to carry on their normal occupations easily and without upset. Later, as they are able, their activities are increased to capacity as their abilities increase, but they are taught that they have a ceiling. Find what it is and warn them not to exceed it. In six week's time they learn how to adjust their activities, occupations and otherwise to their ceiling. Only great physical or emotional strain will cause a slight temporary recurrence. With a little Benzedine Sulphate—2.5 to 10 mgm., they can outface even these with a minimum of disturbance. Patients with poor insight try to overdo things and can cause recurrences in this way, but a little help puts them back on the track when necessary. These are few and far between in this series of cases. Over one hundred cases were treated and fifty histories kept. The patients are available for observation. The same ailment in different patients can be caused by different combinations of past and present factors or of just past or just present factors.

So far, one outright failure was met as far as cure is concerned because of an insurmountable interpersonal factor which meant divorce and children suffering. It was a "shot gun" wedding to begin with and he hated his wife. Also, co-operation was poor.

Symptoms cleared in 80%, improved in 15%, while 5% were unco-operative. In the 15% improved the failure to obtain complete cure was due to irreversible morphologic changes. In a diabetic of twelve years' duration, her insulin requirements dropped from twenty to eight units of protamine zinc in twenty-four hours and her mental out-

ook improved. Several cases of glycosuria associated with emotional conditions cleared up completely. The syndrome frequently present in diabetes is a hyperattachment to a parent or a marital partner with tension and quarreling in the home. In thyroid cases there was often a fear reaction producing mental conflict.

Emotional factors were located first, then treatment and observation of what happened in the various diseases carried out. A great deal of this work was done, of course, without financial remuneration. In nearly every case of chronic disease of unknown origin improvement or cure, mostly cure, was obtained. The vast majority of chronic cases of unknown origin fall under the classification of psychoneurosis, with somatic disease. In fact, any chronic ailment seems to benefit to some degree from psychiatric treatment and, in my opinion, it should be used in them routinely. With this quick technique it does not take long and some surprising results may be obtained. In addition to psychoneurosis with and without somatic disease, it was found that in conditions like divorce problems, delinquencies, sex perversions and even crimes which are due to obsessive compulsive reactions, this technique is of definite value. The underlying basis in social misbehaviour is often a psychoneurosis and many apparently react quite well. It is a field which will bear further investigation with this technique.

Discussion

Neuro-muscular nerve tensions are caused by some great insurmountable past mental repression or present environment factor or a series of such small factors building up cumulatively. In locating possible factors it is found that a mental conflict often gives a clue to the type of environmental factor and vice versa. If one is present, searching for the other along these lines and desensitizing the mental factor and correcting the environmental factors is the usual procedure. Mental conflicts act as sensitizations to the environmental conflicts. Further, it is found that most patients have symptoms involving many organs of the body if they are looked for, but usually one organ is involved so much that it overshadows the rest and claims the patient's whole attention to its symptoms.

Certainly, the best and quickest results are obtained in patients having a high intelligence, a higher education or more insight into themselves. Techniques are varied with age, education and intelligence of the patient. In this series, this technique has given an extraordinarily high rate of cures. The cures were permanent in those with good insight and high intelligence. Those with poor insight got great temporary relief from symptoms, but as in all psycho-therapy would not live within their limits. These patients would permit environmental factors to build up and had to come periodically for readjustment and education as to how to overcome these factors, until finally they learned their lesson thoroughly in the hard way. In any case, they were much better treated on this field than on the surgical or medical field. The improvement was much longer, the illness slight and a few minutes talk was all that was necessary to relieve any recurrence of symptoms. This was in spite of the fact that it was necessary to fight the battles of psychiatry as well as treat every patient.

Children are treated best on a simple relationship level. The cause of the ailment is the handling of the child by the parnt and rarely by the teacher. The cause is nearly always found in the parents and psycho-therapy is given to them. It is a chain reaction. Often the parents are psycho-neurotic or ill, or too busy to give the children the emotional satisfaction they crave. The mother and father are taught to pick up their children and pet them three to four times daily, giving plenty of praise and encouragement to avoid hurting their feelings and always to explain reasons for so doing when it is necessary to do so. Only enough discipline is permitted to give proper training to the child and this is rarely necessary as a reproof is generally enough for a hypersensitive child. Reproof or discipline should always be followed within a few minutes by a demonstration of affection and an explanation as to why it was necessary. Bronchial asthma, bed wetting, stuttering, various behaviour problems and stomach disorders such as poor appetites, nervous diarrhoeas, etc. react in a startling fashion. In a few minutes to a few hours symptoms start to clear up. The only psycho-neurosis in which there is any difficulty with this technique is in the hysteria group who have a fatal facility for blanking

out unpleasant memories. Uncovering psycho-therapy is used. This work is done on a theory that apparently all psychoneuroses with and without somatic disease are due to conditioned reflexes caused by psychological stimuli. The stimulus may be in the past. If it is of sufficient magnitude and is always present in the mind, as a repressed thought, it may constitute what is called a mental conflict. It may be in the present with the past factors acting as sensitizations, or it may be that a series of past and present stimuli act cumulatively.

By reliving past experiences (that is, bringing out the repressions) the mind is desensitized to them and some relief can be obtained (Freud & Bruer principle). Removing the stimuli by adjusting environmental factors completes the job, but once a pathway is established, emotional re-education or education in psychiatry is necessary to teach the patient how to meet future situations which may act as stimuli to this type of reaction. The most important part is to each the members of the family group to understand each other so as not to hurt each other's feeling and to make up quickly if they do get into a quarrel.

Desensitizing the mind by reliving past experiences, raises the tolerance for the patient; that is, it requires a greater stimulus to set the reflexes in motion but it is very questionable whether the reflex is ever completely eliminated. Therefore, emotional re-education in meeting certain situations which might start th reflex operating is necessary.

Mental conflicts however, once desensitized, do not recur as it takes time to re-establish them. If they are acting as factors in creating tension then once they are desensitized the patient's resistance to environmental stimuli is raised to the extent that the conflict contributed to his tension. If a conflict could recur, the patient could desensitize it himself as before so there is no danger. Also by keeping in mind or remembering unpleasant experiences for a few days; i.e., not repressing them, the mind desensitizes itself so they can't recur.

All emotions such as fear, worry, anxiety, hate, jealousy and conscience factors, etc., can cause these stimuli as mental conflicts or as environmental factors, by causing repressions of the past factors or some lack of expression in present ones. Translated into occult or religious terms, any sinful or wrong thought or deed or fear is punished in the man by this means. Through religious channels, therefore, cure may also be obtained. Religious education and emotional re-education, faith and auto suggestion, confession and psychiatric history, prayer and desensitization, may be considered as alternatively similar psychologically and can be used optionally depending on the psychology or religious beliefs of the patient.

As mentioned, difficulty in treatment with this technique was only encountered in the hysteria forms. In this group either better information has to be obtained from relatives or uncovering psychotherapy (narco-analysis or hypnosis) practiced. In treatment some autosuggestion and some desensitization is possible. In this series all cases so far have been solved with uncovering psychotherapy and information from relatives, usually the husband.

It is realized that most psychiatrists may claim that the percentage of relief from symptoms is high. The percentage depends on the ability of the psychiatrist to establish a proper rapport, to get the co-operation of the patient and, further, on his ability to persuade the patient that his interest is personal. Embarrassing transfers of affection do not occur in this technique, owing to the speed and the fact that the patient desensitizes himself.

It is about two years since it was found that most patients could desensitize themselves sufficiently in two to five days to become symptom-free in psychoneuroses with and without somatic disease, with a little help. Also, they could analyze themselves with their own somatic reactions as a guide provided they were taught and guided in the process.

Advantages of Techniques:

1. Speed—in two to five days physiological tension is released and the patient's co-operation assured.
2. Improvement can be promised within such a short time that the patient is more willing to co-operate and unless a patient is willing to co-operate reasonably it is not possible to help him.
3. As the patient is partly his own confessor (although he may retain some factors) little resistance is met and so narco-analysis, hypnosis, shock therapy, etc. need rarely be used. To date there has been no great trouble in getting information necessary from the patients.
4. Because of the speed and the patient doing his own desenstitizing, no embarrassing transfers of affection are involved as in the longer techniques.
5. It can be used in more acute cases if necessary.
6. Less financial cost to the patient is involved.

Disadvantages:

1. The technique is so simple that there is danger of quacks and other people without sufficient medical and psychiatric training using it with incomplete results as to re-education.
2. A physician without a sympathetic personality, knowledge of psychiatry and insight as to possible causes of neuroses and have some practice in application may be unable to apply the technique properly.
3. As with psycho-analytic techniques, the psychiatrist should put himself through this technique before attempting to treat patients. This, if he is hypersensitive, will give him greater insight into his own psychological reactions and, therefore, the patient's.

Comments:

The percentage of cures may seem high but of the first six cases treated with this technique (two anxiety neuroses, one a reactive depression, one migraine which was almost constant, one case of essential hypertension, one case of hysterical anaesthesia) five lost their symptoms completely and one partially. This relative average continued through the testing period on chronic ailments, many of which were not known or expected to be on the emotional field. Psychoneurosis without somatic disease such as anxiety neurosis, obsessive compulsive reactions, depressions, etc., seemed to react quickest and to give best results. Apparently the biggest single factor in creating psychoneurosis is the impression that all people have and even are taught in schools that if an unpleasant experience is undergone the way to get rid of it is to "forget it." The patients spend all their lives trying to do this and their nerves get worse and worse until actual suffering and mental, physical and asocial behaviour occur. By application of Freud's and Bruer's principle any repression, brought from the subconscious to the conscious repeatedly, disappears. By trying to remember unpleasant experiences till the conscious mind files them away, and adjusting environmental and interpersonal factors in a home to make them suitable by means of emotional re-education, a lot of suffering would be prevented.

Very few people have will power enough to repress every unpleasant experience indefinitely and, even in them, efficiency is cut down. Even in the strongest minds the ability to repress is governed by the sensitivity of the patient (the higher the I.Q. the greater the sensitivity), the amount of unpleasant experiences or trouble and the magnitude of these experiences. A sufficient amount of unpleasant experiences will break even the greatest mind. In teaching, therefore, trying to remember unpleasant experiences rather than trying to forget them should be the rule. If this fact is pointed out to a psychoneurotic he immediately reverses his attitude towards his repressions. He reports less difficulty in remembering them than in trying to repress them and improvement follows in a few days. The type of symptoms, mental, asocial or physical, is not important. The Department of Mental Hygiene, Ottawa, states that 56% of all our children

are slated for nervous troubles. This figure may be too low if chronic disease is added to this score. The more complex life gets in a higher civilization the more traumas and repressions multiply unless handled this way.

It was interesting to find that psychoneurosis with and without somatic disease were found in introverts and mixtures of introvert and extrovert personality types. Hysterical symptoms developed in extrovert personalities. This is in line with Pavlov's work on conditioned reflexes in dogs. As one would expect, therefore, treatment of the hysteria groups tends to fall mainly on the invironmental field whether interpersonal relationships or occupational while in the first two groups the treatment falls either on the mental conflict field or both mental and environmental.

(With acknowledgment and thanks to Dr. G. A. Davidson and Dr. D. Williams for their help and support in preparing this paser.)

CASE HISTORY

Mrs. R.B.

Age 40. First seen January 14th, 1947.

Symptoms:

Nervousness, hands and feet stocking anaesthesia, no feeling and no circulation in the fingers from the palm down. She has cut her fingers with a knife and experienced no pain or bleeding. Symptoms started over two years ago, at first sporadically, later more or less constantly present. At first only the hands were affected, then the feet, and later spreading to the face. Her back feels cold and clammy. She complained of sleeplessness, tremor, migraine and specks before her eyes.

Past History:

She came from a large family and lived in a small town. Her father drank steadily and heavily. She rather envied other children. She was chased by an Indian as a child. She has always tried to forget this episode as she was badly frightened. It recurs in dreams occasionally. She married quite young and had two children. Her first husband was killed and she married again and moved to a different town to live. Her home burned down and her husband developed tuberculosis. She had a hard time trying to live on $40.00 a month. She was also frightened here by an Italian peeping through her window. She has two children by her second marriage. Her youngest child, twenty-two months old, is not walking and does not try to even pull herself up. Child developed spastic condition of limbs. Husband was in the Sanatorium, later returned and she had to go in.

Physical Examination:

X-ray of chest negative. Blood negative. Urinalysis negative. Intense tremor of fingers and apparent deadness of half of hands.

Diagnosis:

Hysterical Anaesthesia.

Treatment:

Mental repetition of past repressions and unpleasant experiences. Anaesthesia began to let up within twenty-four hours. Little environmental adjustment could be done at the time. Later the child was treated successfully. In order to help maintain improvement and make it permanent some adjustment in finances was made by the Social Welfare. On January 15th, 16th, and 17th the hands cleared up. She was awake all night after a house party and the condition of her hands returned temporarily. After the third consultation the hands stayed clear for days.

February 4, 1947—reports complete freedom from tension. Sleeps well. Condition of hands good. Patchy recurrence once when she went to a ladies' meeting.

February 7th—reports hands turn bluish and whitish for a few minutes. She does prescribed mental exercise and they clear up immediately. She can banish the anaesthesia at will now.

February 14th—husband sent to the Hospital with pleurisy. Anxiety made hands blanch a little but she removed it voluntarily in a few minutes.

February 23rd—she has had no recurrence since to date and feels she no longer requires treatment and feels capable of handling the matter herself now.

October 16th, 1947—recovery complete as no recurrences of anaesthesia since February 24th, 1947.

CASE HISTORY OF CHILD OF MRS. R.B. MENTIONED ABOVE

Baby L.B. Age 22 months.

Diagnosiss

Spastic muscles of back and legs. Baby unable to life itself in crib or walk. Saw child first January 16th, 1947. Diagnosed as a condition following premature labour and fear of walking in the child (hysteria).

Treatment:

Mrs. B. was advised to massage the muscles of back and legs but to also try and teach the child to get up and overcome the fear complex and the fear of pain.

January 22, 1947—Mrs. B. reported she had gone into the bedroom and the child had pulled herself up in the crib for the first time.

January 27, 1947—child gets up herself and tries to walk holding on to objects but is still a little stiff.

February 4, 1947—child lifts herself easily and can walk if one hand is held. Still a little stiff and uncertain about knee movements.

February 8, 1947—child took two steps alone.

February 14, 1947—child very active and walking quite freely with support and sometimes without.

October 18, 1947—recovery complete and child normally active.

Comments on Mrs. R.B. and Baby L.B.:

The chief value of these two cases is to show that mental factors and environmental are cumulative in their results. Reliving past factors was sufficient to relieve this patient's anaesthesia in spite of her child's ailment. In order to make it lasting the child's condition had to be improved. In spite of financial troubles such as supporting a sick husband and two children on $40.00 a month, recovery was possible. This was the patient who led me to investigate other types of somatic disease. If emotional factors could cause circulation to be cut off in such diverse places as hands, feet and face, then the same thing could happen in any gland or organ or blood vessel in the body with disastrous results as in diabetes, hyperthyroidism, anginas, essential hypertension, etc.

CASE HISTORY

Mr. L.S.

Age 35. Teacher. Came to see me October 21st, 1946.

Mental History:

Brothers used to scare him as a child in the dark by imitating wolves. Scared him so that he was scarcely able to breathe. From 1914-1919, during school years, children called him German and used to gang up to beat him up. Later he fell while mountain climbing and held on to a ledge for some considerable time until rescued. During young manhood he married and had difficulties with his in-laws. His wife died and this left him with a sense of guilt in taking her away from home.

Symptoms:

Later he developed an attitude of superiority to people in order to show how tough he was, but he was always afraid that he might be considered weak and so was more aggressive. He became chronically tired, unable to work or concentrate. He began to drink heavily but it only relieved him temporarily. Gradually he became more tense and nervous. Developed a fear of heights and driving in high places. He became more irritable. Would find himself holding himself tense, even while writing on the blackboard, for fear of falling. Dizzy spells came on. He had had gastric trouble for years, diagnosed as mucous colitis. He developed fear of knives and started to hide them. He developed fear of going insane and contemplated suicide. Heart palpitations made him miserable. He saw many doctors and was diagnosed as neurasthenic. Migraine constant.

Physical Examination:

Rapid pulse rate with extremely frequent extra systoles. Very nervous. Pain in epigastrium. Otherwise negative. Tachycardia at times. X-ray—mucous colitis. Electrocardiogram normal. Urinalysis negative. Gastric analysis normal. Neurological examination negative.

Diagnosis:

Anxiety Neuroses.

Treatment:

Mental repetition of all past repressions. All signs and symptoms and obsessions relieved in four days. Environmental factors cut down activities to just school teaching temporarily. Mucous colitis cleaned up about the tenth day. Emotional re-education carried on for five weeks.

Result:

January 4, 1947—completely cleared up in two weeks, gradually increasing confidence in himself. Extra systoles only under great emotional or physical strain. Has become more alert and ambitious toward his school work. Has more pep and again has started to do a little Insurance business. Is returning to his University studies and can do ten times the work he had been able to do in years. His constipation has cleared up and bowels are looser and normal for the first time that he can remember. He was discharged from treatment on December 16, 1946, symptoms all cleared up.

January 26, 1947—some symptoms recur only if awake 36 hours working or under excessive emotional strain, then an odd systole appears and cramps, pain and tenseness occur in the epigastrium. This is only fleeting and if he rests up or the strain is relieved he is back to normal.

Comments:

This case is a typical case with homicidal and suicidal obsessions. In four days it clears up when the patient relives all the unpleasant experiences in his past life which he tries to forget. Because an experience is unpleasant, and the training we get teaches up to try to forget unpleasant experiences, this type of case results. The patient tries to block off or blank out of his conscious all unpleasant memories. When the thoughts recur he represses them and gets somatic symptoms for which he consults medical men who treat, but cannot control the symptoms, because they are mental. In time the memories or experiences create a confusion and come out in a distorted form. As the patient was highly intelligent the cause of his symptoms was explained and that the symptoms were not dangerous. Further, he was told that if he tried to remember all unpleasant experiences and the symptoms became worse for a few days, not to worry about them but keep on. In four days he feels as if a cloud has rolled off his mind and he feels better physically than he ever felt before. Nerve tension is released and all symptoms disappear. During moments of great physical or emotional stress, or when very tired, a slight warning tension develops and he immediately takes measures to control it by rest or cutting down his worries. The patient, by the way, is carrying on about five occupations at one time.

One year later, October 16, 1947—patient feels fine and mental and physical improvement still increasing.

CASE HISTORY

Mrs. D.R.

Age 42. First seen on January 25th, 1947.

Symptoms:

Nervousness, increasing since last baby; melancholia; depression; loss of sexual desire; at times wishes she were dead; afraid of insanity; considers suicide by drowning sometimes.

Previous History:

As a child—negative. Before marriage, as mother and father were going to Canada, forced their hand with pregnancy and married husband. Came to Canada a year later. Husband had work at first but later they had to live on relief. Did not want children, committed abortion. She has a large family—one girl 17 years old, last baby a few months old. Developed depression and melancholia during last pregnancy, gradually getting worse. Treated for nervousness since and afraid of having more children. One of the girls, age 15, is a problem.

Mental Traumas:

Aside from being high strung and tense all her life, none till pregnancy before marriage.

Maid-of-Honour for her sister in church. Mistook directions from her sister and wandered into the wrong place during the Wedding March. She was in a near accident on a bad road later. Domestic sexual difficulties increasing and husband rebellious. Cannot go to the show or among people or listen to the radio as head aches too much and she gets too upset.

Diagnosis:

Depression and migraine.

Treatment:

Being tired, this patient was asked to go home and relive all past unpleasant experiences in order to be able to give me a connected story in two or three days. Within twenty-four hours improvement set in. Depression and migraine started to lift.

February 4, 1947—patient reported by husband to be joking and laughing for the first time in many months. Emotional re-education was carried on for five weeks. The patient's condition was explained to the husband and daughter and their co-operation established.

Comments:

This patient was under treatment for migraine and depression for four years before I saw her. She has five children and in spite of the responsibility of looking after them and settling their disputes which make her nervous at times, she is adjusting satisfactorily at to date, October 18, 1947.

CARCINOMA OF THE COLON AND RECTUM

DR. A. T. HENRY

Carcinoma of the colon and rectum occupies a prominent place in the field of major surgery. It carries with it a great responsibility because of its complications, for one does not have only to contend with the area of tumour itself but with potential infection and associated obstruction as well as with debilitated patients due to delayed diagnosis. When we realize that between 10 and 15% of all cancer of the body arises in this area it behooves us to attempt to arrive at earlier diagnosis than records in the General Hospital would indicate. Particularly is this true in light of the diagnostic measures which we have at hand. It would appear that at least 60% of these growths are visible to the naked eye if they are looked for. Also as this is primarily a disease of the fourth, fifth, sixth and seventh decades and as life expectancy is becoming more prolonged we can expect further increase in its incidence. However records indicate this disease to be present in the younger age group as well as in the later decades, and one cannot emphasize the importance of a thorough and complete examination of all patients with any irregularity of bowel habits. In this series 4% were below the age of 45.

A review of the cases in the Vancouver General Hospital in the year 1944-45 showed 94 new cases admitted for treatment. This was out of a total of 637 cases of all cancer and out of a total of 25,431 cases admitted to the hospital in the year (15%). This average is about the same as other years, for in a previous paper several years back I quoted 104 cases out of a total of 970 in 1941 or 11%.

The age incidence was:

20 - 30	2
31 - 40	2
41 - 50	4
51 - 60	23
61 - 70	33
71 - 80	27
80 plus	4
Total	94

In this group there were 51 males and 43 females, but over a long series it will be found that it is pretty well divided between the sexes.

The sites of growth in this small series were:

Caecum	0
Ascending colon	7
Hepatic flexure	5
Transverse	6
Splenic flexure	3
Descending colon	5
Sigmoid	32
Rectum	32
Anus	4

The above figures show the great necessity for the use of the sigmoidoscope.

The symptoms are all well known to us and include:—

1. Bleeding from the anus.
2. Irregularity of bowel action.
3. Pain—a late sign.

Bleeding is seldom severe even though constant. In fact the most severe haemorrhages I have seen have been from diverticula rather than carcinoma. The blood is usually mixed with mucus and may be a late symptom.

The irregularity of bowel action is related more to the growths in the sigmoid and rectum and is of two kinds. Firstly the slowly developing constipation due to narrowing of the lumen and secondly the so-called intermittent diarrhoea. The latter is not a true diarrhoea but rather a feeling of unsatisfactory elimination so that the patient after defaecation has a desire soon to return to stool. This is due to the bowel trying to get rid of a foreign body not normally present. In taking a history, therefore, it is important to separate a true diarrhoea with profuse loose stools to that of an urgency and only the passage of mucus and blood. Patients in general do not so distinguish unless it is explained to them. Therefore if a patient calls up for something to stop his or her diarrhoea, one should be sure to find out the details and if it is more than a transient condition be sure that he or she is properly examined.

Pain can be of two types. Firstly the intermittent colicky pain of a progressing obstructive lesion found over the site of the growth and infrequent on the right side because of the watery content of the bowel. The second is the constant dull nagging pain found in rectal growths. In the advanced group with secondaries along the lumbar glands we get the pain radiating down the back of the thighs very much as in the referred pains of disc lesions. This may become very severe and mistaken for sciatica and rheumatism and has in our hands been best handled with chordotomy. Dr. Turnbull has done quite a number of these operations for us, both in inoperable cases as well as post-operative cases later developing these manifestations.

The records also brought out an interesting point in the number of hospital beds held up in these cases. There was a total of 4330 days in hospital or an average of 47.5 days per case. The longest stay in hospital was 296 days. These number of days could be greatly reduced if we had nursing-home facilities to look after these people. There is urgent need for such facilities.

It was difficult to analyze a lot of the histories for statistical points due to poor notes and in fact no histories at all. Some of this can be accounted for by shortage of internes due to the war and also to overwork on the part of the doctors themselves and inability to keep up with their charts. However, it would appear that the mortality rates in all cases operable and non-operable were 35 deaths out of the 94 within a year or 37%.

These were divided into—

Non-operable—9 cases who were all advanced or complicated with such conditions as uraemia and diabetes.

Operated upon—25. Of this group 16 died within 30 days, an immediate mortality of 64%.

Some of the causes listed were:

1. Paralytic ileus—3.
2. Leakage at anastomosis—3.
3. Anaesthetic deaths—2 possibly 3.
4. Coronary occlusion.
5. Pneumonia and volvulus.
6. Perforation of growth and peritonitis.
7. Obstruction following caecostomy.

So much then for statistics. Let us now consider the more practical aspects of examination, diagnosis and treatment.

Whenever a patient presents himself with the symptoms and signs already discussed you must verify with the following examination.

1. *Digital*—Although important is probably the least so of all procedures. Remember you cannot feel piles and you may not feel the growth or polyp. One has seen many a case in which a digital examination has not been done and of course that is unpardonable. The chief point I wish to make is not to be satisfied with a digital examination only.

2. *Sigmoidoscope*—This is absolutely essential for everyone who bleeds from the anal orifice. Because you see haemorrhoids and they look red do not be satisfied with that for most people have them to some degree. Never do a haemorrhoidectomy without having a sigmoidoscopic examination done. It is not pleasant for yourself or your patient to have them return later with an obvious growth, and this has occurred on more than one occasion. In probably 15% of people an expert cannot get the sigmoidoscope beyond the recto-sigmoid. If no growth is seen and you are suspicious, and you should be if signs and symptoms are related, then use the X-ray.

The X-ray—Too often in my opinion the first thing that is done is to have an X-ray examination. This is the wrong procedure. There are two reasons why. Firstly, when you can feel and visualize a case why waste the time and money of your patient. Secondly, many cases come to you verging on obstruction and barium by mouth or barium enema completes it. Therefore if you finally have to fall back on the X-ray use only the barium enema, and be sure to have an understanding with your radiologist that if fluoroscopically he runs into a hold up or obstruction, he stops and takes his picture. Barium proximal to a constriction is a nasty and unnecessary complication, adding to difficulty of a satisfactory operative procedure later.

One might just add a word by the way regarding the use of a sigmoidoscope. Anaesthesia is seldom necessary except in small children or occasional painful rectal conditions. It should be done either on a tilting table like the Buie table or in the knee-chest or shoulder position. Personally I like the latter best because it allows better sagging of the abdomen. As I have previously mentioned, if everyone had one passed on himself there would be more respect paid to gentleness and consideration of the patient. Actually it is an instrument that requires experience to handle and to know what you see. It is one of our most valuable instruments and also one terribly neglected. The average interne is not interested greatly in it until he gets into practice and finds he knows nothing about it. If one passes the sigmoidoscope on enough patients the normal becomes familiar, so that any suspicious lesion is picked up and can be verified by another opinion if necessary.

Let us now consider the management and treatment of this condition. One has only time in a paper of this length to touch on a few important details. Firstly let us consider the obstructive cases. As mentioned before, beware of a barium enema. A flat plate is of considerable importance in distinguishing the site and if there is distension and vomiting a primary deflation such as a caecostomy is most essential. Tubal suction preceding this for a few hours will of course make it easier to do.

Before proceeding with the major part of some time of resection good pre-operative attention is a *must*. Personally, if these people can be got out of bed I prefer it. Too much bed and inactivity predisposes to weakness. Blood chemistry must be brought up to as close a normal as possible. This includes blood transfusions and the use of amino-acids and chlorides often lowered by vomiting and diarrhoea. Use compound vitamins especially the B's. The use of intestinal antiseptics such as sulfasuccidine for a few days pre-operatively to cut down the intestinal flora is becoming generally accepted.

The use of anaesthesia. Many of these patients are elderly and suffer from disease of the circulatory system. Those especially with high blood pressure do not react too well to spinal anæsthesia. Of the old anæsthetics ether intratracheally is the best. More recently we have used curare with cyclopropane on some with excellent results.

Finally the various techniques of operation can be found in text books. One, however, might mention a few points. Even in the presence of secondaries in the liver which are not too far advanced I believe the primary growth should be removed if possible. Aside from making the patient's end more comfortable, I feel that it retards

the secondary growths. Anterior resection and end-to-end anastomosis is the operation of choice, and it is amazing how growths below the pelvic floor can be mobilized and brought up to allow this procedure. The question of preliminary colostomy such as the Devine type with end-to-end anastomosis or whether one needs the colostomy is a debatable point. There are the two schools of thought. With proper preparation of the colon and the post-operative use of antibiotic drugs I have had excellent results by simple anastomosis using two layers of sutures and interrupted silk. It certainly saves the patient a lot of time and money.

Late advances in low resection with preservation of the sphincters offer better results surgically and socially than hitherto prevailed.

Lastly I would like to mention the use of the electro-cautery. Fulgurization has a prominent place both in the treatment of early cases and of the late ones. It is amazing for example in the former, particularly in elderly people, how the growth can be destroyed and inhibit that unfortunate constant irritable purulent discharge and constant desire for stool. This may or may not be done in association with a colostomy. In the early cases, and this includes a polyp, it is a comparatively simple procedure. Whether a cancer arises in a predominantly sessile state or as a malignant change of a large polyp, one can readily destroy the growth. A growth, shall be say, with a basal diameter of that of a twenty-five-cent piece can be so treated with reasonable hope of a cure. A number of these cases have been followed over a five-year period without recurrence. One of course does not necessarily destroy the growth at one sitting. It may take several sittings to do so and recurrences, usually around the perimeter, may show up months later but they can easily be handled in the same manner. In growths of larger size involving half the diameter of the bowel one should not be very optimistic as to results by fulguration, as in these cases lymphatic spread has to be considered. Obviously to be sure in these cases complete excision is the only sure attempt at cure. I feel that with experience one can rather well define the superficial type of growth amenable to fulgurization by vision through the sigmoidoscope. In the malignant polyp type it appears more or less like an extension of a vine along the wall of the bowel as compared to the perforating or ulcerative type of growth involving the bowel wall.

SURGICAL TREATMENT OF HYPERTENSION

M. ALBERT MENZIES, M.D.

The poor results of medical treatment of hypertensive vascular disease have focussed increasing attention on surgery in the management of this condition. The two main groups of surgical treatment are, first, surgery for known definite organic lesions causing hypertension; and second, treatment of essential hypertension by sympathectomy.

To dispose briefly of the first group this paper proposes only to mention some of the more important of definite hypertension-producing lesions amenable to surgery. These include unilateral kidney disease, brain tumour (or other cause of increased intracranial pressure), coarctation of the aorta, pheochromocytoma, adrenal carcinoma, chorion-epithelioma, hyperthyroidism, arrhenoblastoma, adrenal-like ovarian tumour.

In all these conditions the surgical treatment is to deal with the lesion in question. In cases of unilateral renal disease, Ratliff reports improvement or cure in about 50% after nephrectomy. Smithwick treated eleven cases of pyelonephritis by sympathectomy with 100% good results. Ratliff has studied a large series of cases; and he tells us the best hypertensive candidates for nephrectomy are "adult" chronic pyelonephritis, hydronephrosis, and calculous pyonephrosis. He found this type of surgery advisable in less than 5% of hypertensive patients.

The main portion of this paper is devoted to treatment of essential hypertension by sympathectomy. Our ignorance regarding the etiology of this condition precludes a

sound elaboration of rationale for any type of treatment. The theories backing up sympathectomy bank heavily on prevention of neurogenic renal ischaemia by section of the nerves. Also considered are decreased peripheral resistance from vascular relaxation in the splanchnic bed and lower extremities; and reducd secretion of adrenalin from emotional stimulus.

Sympathetic nerve section was first tried in 1925 for hypertension by Rowntree and Adson. But it was not seriously considered and investigated until 1935. Since then the pioneers Adson, Crile, Peet and Smithwick have led the way, aided by contributions of Grimson and several others. Four main types of procedure are still mentioned in the literature. Infradiaphragmatic splanchnicectomy, done by Adson and Craig at the Mayo Clinic, seems to produce more temporary results than other methods. Bilateral supra-diaphragmatic splanchnicectomy has been performed by Peet in 1500 cases over a period of thirteen years. His results are characterized by marked symptomatic relief and moderate blood pressure reduction. Smithwick combines these two procedures, with more consistent lowering of blood pressure, accompanied frequently by sterilization in males. Arrived at by experimentation, this is the most favoured operation to date, and Smithwick has reported on its use in 500 cases. Almost total sympathectomy has been tried by Grimson, but most observers feel this probably is more extensive than necessary. No one yet can say which will turn out to be the best procedure.

The mortality of sympathectomy is less than 3% in good hands. Peet describes his method as a single operation lasting forty-five minutes to an hour and a half. He has most patients up in one week; two weeks in hospital and four weeks rest at home; a total of six weeks before the patient returns to work.

Several important criteria are considered in selection of patients for operation. Smithwick bases selection on age, eyegrounds, diastolic blood pressure level, response of blood pressure to sedatives (sodium amytal test), state of cardiac function and state of kidney function (phenol sulphonephthalein test). Age should be under 53 and preferably under 30, but may go up to 58 for incapacitating symptoms. Recent evidence of coronary disease and renal failure are contra-indications. Peet prefers NPN under 40. In the absence of intractable cardiac decompensation, gross cardiac enlargement is not necessarily a contra-indication. In fact many cases show striking post-operative reduction in size of enlarged hearts. A cerebrovascular accident contraindicate operation if severe brain damage has occurred, but not so in a patient under fifty who has completely recovered from the accident. Encephalopathy is unfavourable if mental changes are marked and of long duration or mild but due to repeated thromboses. However, in cases of mild, recent encephalopathy one may expect complete recovery post-operatively.

Of great significance is the patient with malignant hypertension. Recognized by eyegrounds with papilloedema and usually haemorrhages, exudates and angiospasm, high diastolic blood pressure, usually moderate to severe renal damage and varying degree of heart damage, the outlook of this patient with medical treatment is absolutely hopeless. But if cardiac and renal damage are not far advanced, operation is indicated and may give a very good result.

Peet's ideal case for sympathectomy is under 54 years of age, with a more or less continuously elevated blood pressure systolic over 170 and diastolic over 105 mm., NPN less than 45, a well compensated heart and relatively normal cerebral function. He makes notable exceptions in cases with incapacitating symptoms or in otherwise hopeless malignant hypertension.

Results of sympathectomy have been very encouraging. Life expectancy seems to be increased in many cases of malignant hypertension, particularly if surgery is not too late. Usually most marked is symptomatic relief. Peet reports headaches, nervousness, insomnia and palpitation greatly or completely relieved in 86% of those still living 5 to 12 years after operation. This relief of symptoms does not seem to depend necessarily on significant lowering of blood pressure or improved heart or kidney function. 55% of his completely incapacitated patients were able to return to their former work and 81.3% to some kind of work.

Although less prominent than symptomatic relief, lowering of blood pressure has been the usual result following sympathectomy. In 81% of those still living 5 to 12 years after operation in Peet's series, both systolic and diastolic levels were significantly reduced. An increase was found in 6% and no change in 13%. Of the 81% good results, one-fifth were graced by normal blood pressure levels. Including cases that died, significant blood pressure reduction occurred in 46.7%. Smithwick's more extensive procedure improves this figure to 79.4%. With a preoperative grading into three types according to pulse pressure, he has found the best results in type 1 (pulse pressure less than half the diastolic pressure). Thus the best response to surgery is found in the group least responsive to medical treatment.

Similarly in the ophthalmoscopic picture, the more advanced the ocular changes the higher the percentage of improvement. Disappearance of angiospasm, haemorrhages and exudates has been reported in 82% of cases; even blindness has been relieved by sympathectomy. In Peet's 21 malignant hypertensives still living, papillodema disappeared in all cases and has never returned. Improvement or lack of progression of retinopathy is the rule in the great majority of cases.

Cardiac enlargement has shown a significant reduction in 52% with striking hymptomatic improvement. The electrocardiogram has returned to normal in a significant number of cases. Paul White's study reported great frequency of marked post-operative improvement in the electrocardiogram.

Improved renal function has been shown by return of urea clearance to normal in 45% and improved concentrating power in the same number of cases.

The generally typical picture of significant objective response and marked subjective improvement is illustrated by the results of Berwald and Devine. Adson's and Smithwick's techniques gave them an average reduction of 78 mm. in systolic and 15 mm. in diastolic pressure, with objective improvement in 64% of cases and subjective improvement in 92.5%.

During the past thirteen years essential hypertension has been treated by section of splanchnic nerves and removal of part of the thoracolumbar sympathetic chain in at least 2,500 reported cases. Usually either a single operation or two stages ten days apart, operative mortality is less than 3% in skilled hands. Operation has resulted in a very high frequency of relief from incapacitating symptoms. In a large percentage of cases significant lowering in blood pressure has been obtained, along with arrest and even reversal of retinopathy, cardiac, renal and cerebral changes. Patients totally disabled for long periods of time up to four and one-half years have been restored to normal earning capacity. Malignant hypertension is not always hopeless, as excellent results are frequently obtained by thoraco-lumbar sympathectomy.

Internist and surgeon alike emphasize assessment of progression of disease. Uncertainty of results requires presenting facts to the patient before advising operation. In the words of Peet, "surgical treatment is a measure to be considered in management of every case of essential hypertension, but to be used only when indicated. Evidence of progression and activity of hypertensive disease is the indication for surgical treatment."

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INFECTION AS RELATED TO MATERNAL MORTALITY

J. W. MILLAR, M.D.

In the past 15 years there has been a steady decrease in maternal mortality. In 1930 the rate for the United States was 6 per 1000 live births. In 1942 it was 2.5 per 1000. The decrease has been in relation to all causes, but in recent years has been particularly noticeable in the field on infection. This general decrease has been due to many factors including education of the profession, education of the lay public, better hospital facilities and recent advances in medicine, notably the advent of penicillin, sulfonamides and streptomycin. With regard to infection, it is noted that in 1941 38 percent of all maternal deaths in the United States were due to infection.

A very interesting paper was presented by staff members of the Chicago Lying-In Hospital last June reviewing maternal mortality between 1931 and 1945. Their statistics with regard to infection are most interesting. The mortality from all infection was 39 percent of the total, and included 32 deaths. Of these, 19 were due to genital infection and 13 due to extragenital infection. They have classified infections into two groups: (a) genital, and (b) extragenital.

Classification of Infections.

(a) Genital—arising within genital tract.
Organisms present in their series were represented as follows:

1.	Haemolytic strept.	9
2.	Anaerobic strept.	4
3.	Bacillus Welchii	2
4.	Others	4
	Total	19

(b) Extragenital—those encountered in the same series were as follows—

1.	Tuberculosis	4
2.	Pneumonia	5
3.	Meningitis	3
4.	Diphtheria	1
5.	Ruptured Appendix	1
	A total of	13

deaths or 16 per cent.

Prevention is our main concern in further reducing mortality due to infection. Prevention of infection, as always, should still be considered about the most important factor in good obstetrical care. I have divided this into four phases.

1. *Good Pre-Natal Care.*

When a woman's health is good she is much more able to resist and cope with any infection to which she may be exposed.

(a) Blood should be checked regularly during pregnancy.
An anaemic patient handles infection poorly.

(b) Elimination of foci of infection.

(c) B.M.R.—lowered metabolism means lowered resistance. At the Mayo Clinic they say it impairs circulatory activity plus tone predisposing to thrombophlebitis.

(d) Chest X-ray—all patients should have a chest plate. In the past two or three years in my practice five cases of pulmonary tuberculosis have been caught early which otherwise would have been missed. Two of these only have required termination of pregnancy.

(e) Diet, vitamins and general health rules should be discussed with and understood by the patient (e.g. no douches, no tub bath in last month, etc.).

(f) Leucorrhœa: never cauterize an eroded cervix during pregnancy; a parametritis may easily follow.

2. *Good Management of Labour.*

(a) By nurses —caps and masks.
—good nursing technique.
—as few rectal examinations as possible. At each rectal examination the post-vaginal wall is pushed up and wiped around the cervix and may thus introduce bacteria.
—nourishment and good sedation to maintain and conserve the patient's strength.

(b) By doctors—proper use of mask over nose and mouth as haemolytic streptococci are often carried in the nose and throat.
—good case room technique. The commonest bad habit in Vancouver General Hospital is wearing masks over the mouth only. This point is stressed repeatedly by Titus.
—isolation of infected cases.
—as few vaginal examinations as possible, and when done strict technique to be observed.

3. *Good Obstetrical Judgment.*

This means mainly early evaluation of cephalo-pelvic disproportions and thus the avoidance of protracted exhausting labours with repeated examinations, the trauma of difficult forceps, the need for late Caesarean sections. The elimination of high and difficult mid-forceps will decrease the extent of trauma and resultant infection.

Caesarean Section.

Peritonitis following Caesarean section stands high in the list of deaths due to genital infection. The safest time for Caesarean section is before labour as an elective procedure.

The carefully conducted test of labour has increased the safety of Caesarean section. Dieckman reports that Caesarean section still carried a mortality of 2-5 per cent in larger clinics and perhaps higher than that in the country at large. Caesarean section as a way out of trouble in the patient who fails to make progress after several days of labour, and following numerous examinations, is a hazardous procedure. Davis states "the criticism that too many Caesareans are performed in this country" is a valid one, but even greater criticism should be levelled at the fact that too few are done at the right time.

Disproportion at the inlet is met at the onset of labour and will be recognized early. Disproportion in the mid-pelvis and outlet are not so easy and must be assessed early.

4. *Good Care During Puerperium.*

(a) Good nursing technique.

(b) Activity. An active puerperium is important. It is particularly important in preventing thrombo-phlebitis of the pelvic veins, which process combines stasis and infection. David states: "Bed rest has been indicted as the most important single cause of embolism, so many patients are now allowed up on their second or third day. It is likely that the pendulum has swung too far and that restricted bed rest and moderate activity in bed may be the greatest aids to recovery as well as the greatest safeguards in the prevention of thrombosis." At the Chicago Lying-In Hospital free movement in bed is insisted on immediately following delivery and exercises are started early. Patients are kept in bed eight or nine days.

Treatment.

1. Parenteral fluids.
2. Transfusion and plasma.
3. Sulfonamides, penicillin and streptomycin—early and adequate dosage.
4. Extraperitoneal Caesarean section—the Waters operation where a late Caesarean section has to be done. As this procedure becomes more widely used the mortality from late Caesarean section should drop.

PROVINCIAL DEPARTMENT OF HEALTH AND WELFARE
DIVISION OF V. D. CONTROL
Penicillin Treatment of Primary, Secondary and Early Latent Syhpilis

The recommendations of this division in above type of syphilis is that 26 week schedule of Mapharsen and Bismuth is treatment of choice. This schedule is sent out with drug requests, or is obtainable at local health units, or this Division. Due to difficulty in holding patients for 26 weeks, the following uses of Pencillin are also recommended at discretion of private practitioner.

This schedule replaces all previous Pencillin Schedules forwarded except *those for Syphilis in Pregnancy, Neurosyphilis and Prenatal Syphilis.*

I. Due to rapid changing recommendations in treatment of Syphilis with Penicillin, it is necessary to make further recommendations. It is now recommended that when Penicillin is to be used, all cases of Primary, Secondary and Early Latent Syphilis be hospitalized and treated with aqueous Pencillin, Mapharsen and Bismuth. (Syphilis in pregnancy *must not be treated* by this schedule.)

II. Subject to the proper criteria, Penicillin will be supplied on request for a patient reported on the Form N1 as having primary, secondary or early latent syphilis, providing the patient's name is given as required under the Venereal Diseases Suppression Act.

The criteria for diagnosis is as follows:

Primary—To include those cases presenting the primary lesion of syphilis (the chancre) which have not yet developed secondary manifestations. This diagnosis must be confirmed by darkfield examination, blood test, or both. If blood test is negative, the diagnosis of primary syphilis is not permissible without the demonstration of T. pallidum by darkfield.

Secondary—To include only those cases of early syphilis which show one or more of the manifestations of systemic dissemination of the spirochete; for example, generalized enlargement of lymph glands, cutaneous eruption, mucous patches, condylomata lata, patchy alopecia, laryngitis, bone pains, febrile reaction, and so forth. The chancre may

or may not be present and if present may be in any stage of evolution. This diagnosis must be confirmed by darkfield examination, serologic test, or both.

In early secondary syphilis and in addition to the manifestations listed above, ocular or neurologic complications (iritis, neuro-retinitis, acute syphilitic meningitis) should be specially recorded as "Syphilis, secondary, manifested by . . ."

Latent—Early latent—within four years.

Secondary symptoms have subsided and the active manifestations of late syphilis have not yet supervened. There are no evidences of syphilis other than persistent positive serologic tests of the blood, and history of exposure. The spinal fluid is negative. The date of the negative examination of the spinal fluid should be stated in all cases. A diagnosis (Latent-Tentative) is made in cases where the spinal fluid has not been examined.

For further details you are referred to Pages 13 and 14 of "Procedures and Services in Venereal Disease Control."

III. Plan of Treatment and Follow-up for Primary, Secondary and Early Latent Syphilis (excluding Syphilis in Pregnancy).

1. *It is always a hospital procedure.*

2. Kahn, Complement Fixation, complete blood count, urinalysis and physical examination prior to treatment. In case of early latent syphilis a spinal fluid examination is also to be done.

3. Aqueous Penicillin 50,000 units every two hours day and night for 90 injections. Total 4,500,000 units.

4. Site of injection—upper outer quadrant gluteal muscle.

5. Arsenical Bismuth therapy during eight days in hospital.

1st day—Bismuth 1 c.c. intramuscularly.
2nd day—Mapharsen .04 g. intravenously.
5th day—Bismuth 1½ c.c. Mapharsen .06.
8th day—Bismuth 2 c.c. and Mapharsen .06.

These dosages subject to change depending on the patient's tolerance and weight: e.g. a man weighing less than 130 pounds, or any female, to have a maximum dosage of Mapharsen .04 g.

THE ABOVE TO BE FOLLOWED BY:

6. Bismuth once a week and Mapharsen twice a week for 9 weeks unless contra-indicated.

7. Kahn and Complement Fixation once a month for 6 months.

(a) If there is a persistent rising titre of blood Kahn, we recommend the use of consultative service from this Division. Please forward results of all laboratory tests with this request.

(b) If serology is negative 6 months following therapy, check every 3 months for one year, then every 6 months for a total of 5 years.

8. Spinal Fluid Examination at the Completion of Mapharsen and Bismuth therapy if not done prior to treatment, and repeat at the end of 3 years and 5 years.

9. Cardiovascular examination 5 years from the completion of treatment if possible.

10. Warn patient regarding signs and symptoms of infectious relapse and to report immediately if any appear.

11. Warn patient to report if pregnant.

Penicillin in Oil and Wax (Romansky Formula)

I. In event hospitalization being impossible, Pencillin in Oil and Wax is being supplied by this Division. It is, however, pointed out that P.O.W. is by no means as proven in treatment of syphilis as aqueous penicillin and a good deal of thought should be given before such treatment is carried out. *Syphilis in Pregnancy must not be treated by this schedule.*

II. P.O.W. is supplied subject to criteria as noted in aqueous penicillin.

III. Plan of recommended treatment and follow-up using Penicillin in Oil and Wax for Primary, Secondary and Early Latent Syphilis.

1. Kahn, Complement Fixation, complete blood count, urinalysis and physical examination prior to treatment. In case of early latent syphilis spinal fluid examination is also to be done.

2. 600,000 *units of P.O.W. intramuscularly for* 10 *consecutive days.* It is emphasized that this injection must be given at same time each day for 10 consecutive days. Direction for use of P.O.W. must be rigidly followed. In particular, syringes and needles must be *bone dry.* P.O.W. should not be refrigerated and it must be well shaken before use. If necessary to warm, this should be only slightly above room temperature.

3. *Mapharsen and Bismuth Therapy during* 10-*day Penicillin Series*

1st day of Penicillin—Bismuth 1 c.c. intramuscularly.

2nd day of Penicillin—Mapharsen .04 g. intravenously.

5th day of Penicillin—Bismuth 1.5 c.c. Mapharsen .04-.06 gms.

8th day of Penicillin—Bismuth 2 c.c. and Mapharsen .04-.06 gms.

10th day of Penicillin—Mapharsen .04-.06 gms.

4. These dosages subject to change depending on the patient's tolerance and weight: e.g. a man weighing less than 130 pounds, or any female, to have a maximum dosage of Mapharsen .04 g.

THE ABOVE TO BE FOLLOWED BY:

5. Bismuth once a week and Mapharsen twice a week for 9 weeks unless contraindicated.

6. Kahn and Complement Fixation once a month for 6 months. Follow-up as in use of Aqueous Penicillin (III No. 7-No. 11 inclusive).

SUPPLY OF BLOOD DONORS — THE PROFESSION'S PART

Some months ago, in these columns, an appeal was directed to all doctors asking their influence to help in keeping up the supply of blood donors. We were asked to impress on the relatives and friends of patients who have been given transfusions of blood supplied by the Red Cross, that it was their duty to volunteer, at once, to replace the amount used.

The Red Cross Blood Transfusion Service has stated that the response to this appeal was good, but that the supply of blood from this source is now noticeably falling off.

The physician or surgeon who carries out a transfusion can help, in a very real way, to keep a healthy balance in the "Blood Bank" if he will make a point of remembering to impress on the relatives that it is their duty to replace the blood which has been given free by someone else.

News and Notes

Dr. D. E. H. Cleveland and Dr. Ben Kanee attended the session of the American Academy of Dermatology and Syphilology in Chicago, December 6th to 11th.

Our congratulations are extended to Dr. L. H. Appleby, who was elected member of the Western Surgical Society of North America. Membership is limited to 150 surgeons in North America and Dr. Appleby is the third surgeon ever to be elected from Canada.

We would also congratulate Dr. Charles Gordon Campbell, who was awarded a Fellowship by The American College of Physicians. Dr. Campbell is the only Canadian to win one of the six fellowships awarded.

Dr. R. D. Thompson of Victoria has gone to London, England, where he plans to do post-graduate work.

Deepest sympathy is extended to Dr. S. R. Harrison and Dr. H. W. Riggs on the loss of their wives.

An article appearing in the press recently, which states "Infant Mortality rate here sets record in World" was noted with interest by the medical profession.

Congratulations are extended to the following doctors and their wives on their recent good fortune: Dr. and Mrs. C. G. Campbell, a son; Dr. and Mrs. N. D. Knott, a son; Dr. and Mrs. R. C. Talmey, a son; Dr. and Mrs. B. W. Tanton, a son; Dr. and Mrs. A. E. Trottier, a daughter; Dr. and Mrs. A. C. Walsh, a son; Dr. and Mrs. G. L. Watson, a son.

We regret to record the passing of Doctor George A. Kelman of Fernie. Born and educated in Scotland he received his M.B.C.M. at Aberdeen in 1887, and praticed in Alberta before registering in British Columbia in 1932. Doctor Kelman retired from active practice several years ago. Our sincere sympathy is extened to Mrs. Kelman and family.

Dr. P. Barg, formerly of Essondale, is now doing post graduate work in Montreal.

Dr. R. J. Alexander has left Kamloops to commence pratise in Salmon Arm.

Dr. F. E. Coy who is with the Department of Veterans' Affairs has been transferred from their Vancouver office to Victoria.

Dr. F. H. Davis has left Vancouver to go to the Allen Memorial Institute in Montreal.

Dr. G. R. Callbeck, formerly of Nelson, is now practising in Salmo.

Dr. L. L. Giroux has left Millardville to make his home in Dawson Creek.

Dr. W. J. Fowler has left Portland, Oregon and has gone to New York to do further work in the Montefiere Hospital.

Dr. C. R. Salsbury, formerly resident of Victoria has accepted a position with the Workmen's Compensation Board in Vancouver.

Dr. G. E. Sleath has left Bella Coola and has started practise in New Westminster.

Dr. G. A. B. Hall of Victoria is now residing in Phoenix, Arizona.

Dr. A. J. Kergin of Prince Rupert has gone to Toronto to do post graduate work.

Dr. J. F. Cork has left Ladner and is now associated with the Vancouver General Hospital.

Sincere sympathy is extended to Dr. R. S. Manson on the loss of his father.

Dr. A. W. Mooney has left Vancouver to make his home in Vanderhoof.

Dr. C. E. Cook has left Michel and is now practising in Edson, Alberta.

Dr. A. W. Perry of Victoria is doing post graduate work at the Lahey Clinic in Boston, Mass.

Dr. J. A. Hay has left the Pacific coast and is now living in Foxwarren, Manitoba.

Dr. J. T. Cruise is now associated with Dr. L. A. C. Panton at Kelowna.

We regret to record the deaths of three of British Columbia's well-known medical practitioners, and extend the profession's sincere sympathy to their families.

Dr. James R. Arthur, well-known Vancouver physician, who died very suddenly. Born and educated in Ontario he came to B. C. thirty-five years ago, his death will be keenly felt by the profession.

Dr. G. E. Bayfield, pioneer doctor and former superintendent of the Vancouver General Hospital. Dr. Bayfield practised in the Peace River Country before enlisting early in World War I and was well known up the coast when he served as doctor aboard the Columbia Coast Mission ship. He recently retired after practising in British Columbia since 1904.

Dr. J. Scovil Murray, who was an active member of the profession. Born in New Brunswick, he received his M.D.C.M. at McGill and since coming to Vancouver from Calgary in 1942 he has been practising with the Medical Clinic.

Dr. A. J. Kergin of Prince Rupert is at present doing post-graduate work in Toronto.