THE

BULLETIN

OF

The Vancouver Medical Association

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VANCOUVER MEDICAL ASSOCIATION
PROGRAMME FOR THE FIFTY-THIRD ANNUAL SESSION

Founded 1898; Incorporated 1906.

(Spring Session)

JANUARY 2nd—GENERAL MEETING—Speaker: Dr. R. B. Kerr, Professor and Head of the Department of Medicine, University of British Columbia.

FEBRUARY 6th—GENERAL MEETING—Devoted to Medical Economics.

MARCH 6th—OSLER DINNER—Dr. H. A. DesBrisay, Osler Lecturer.

APRIL 3rd—GENERAL MEETING (Speaker to be announced).

MAY 1st—ANNUAL MEETING.

MAY 28th to JUNE 1st (inclusive)—ANNUAL SUMMER SCHOOL.

REGULAR MONTHLY MEDICAL MEETINGS

FIRST TUESDAY—GENERAL MEETING—Vancouver Medical Association—T. B. Auditorium.

Clinical Meetings, which members of the Vancouver Medical Association are invited to attend, will be held each month as follows:

SECOND TUESDAY—SHAUGHNESSY HOSPITAL STAFF MEETING.

THIRD TUESDAY—ST. PAUL'S HOSPITAL STAFF MEETING.

FOURTH TUESDAY—VANCOUVER GENERAL HOSPITAL STAFF MEETING.

FIFTH TUESDAY—(when one occurs)—CHILDREN'S HOSPITAL STAFF MEETING.

Notice and programmme of all meetings will be circularized by the Executive Office of the Vancouver Medical Association.

Dates of Refresher Courses and weekly fixed meetings in the various hospitals.

VANCOUVER GENERAL HOSPITAL
Refresher Courses for the General Practitioner

NEUROLOGY, NEUROSURGERY and PSYCHIATRY—January 15th, 16th, 17th, 1951.

SURGERY—February 12th, 13th, 14th, 1951.

EYE, EAR, NOSE and THROAT—March 5th, 6th, 7th, 1951.

OBSTETRICS and GYNAECOLOGY—April 9th, 10th, 11th, 1951.

Regular Weekly Fixtures in the Lecture Hall

Monday, 12:15 p.m.—Surgical Clinic.

Tuesday—9:00 a.m.—Obstetrics and Gynaecology Conference.

Wednesday, 9:00 a.m.—Clinicopathological Conference.

Thursday, 9:00 a.m.—Medical Clinic.
12:00 noon—Clinicopathological Conference on Newborns.

Friday, 9:00 a.m.—Paediatric Clinic.

Saturday, 9:00 a.m.—Neurosurgery Clinic.
edition, 1950.

ST. PAUL'S HOSPITAL

Regular Weekly Fixtures

Tuesday, 9:15 a.m.—Paediatric Ward Rounds.
Wednesday, 9:00 a.m.—Medical Ward Rounds.
Second and Fourth Wednesday's in month—Obstetrical Clinics.
Friday, 8:00 a.m.—Surgical Clinic (and alternate weeks) Clinical Pathological Conference.

BRITISH COLUMBIA CANCER INSTITUTE

Tuesday, 9:00 a.m. to 10:00 a.m. (weekly)—Clinical Meeting.
B. C. Surgical Society meeting dates:
Spring meeting—March 30th-31st—Vancouver Hotel (open to all members of the profession).

SHAUGHNESSY HOSPITAL

Regular Weekly Fixtures

Tuesday, 8:30 a.m.—Dermatology.
Wednesday, 10:45 a.m.—General Medicine.
Wednesday, 12:30 p.m.—Pathology.
Thursday, 10:30 a.m.—Psychiatry.
Friday, 8:30 a.m.—Chest Conference.
Friday, 1:15 p.m.—Surgery.

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THE BULLETIN

Publishing and Business Office — 17 - 675 Davie Street, Vancouver, B.C.
Editorial Office — 203 Medical-Dental Building, Vancouver, B.C.
The Bulletin of the Vancouver Medical Association is published on the first of each month.

Closing Date for articles is the 10th of the month preceding date of issue.

Manuscripts must be typewritten, double spaced and the original copy.

Reprints must be ordered within 15 days after the appearance of the article in question, direct from the Publisher. Quotations on request.

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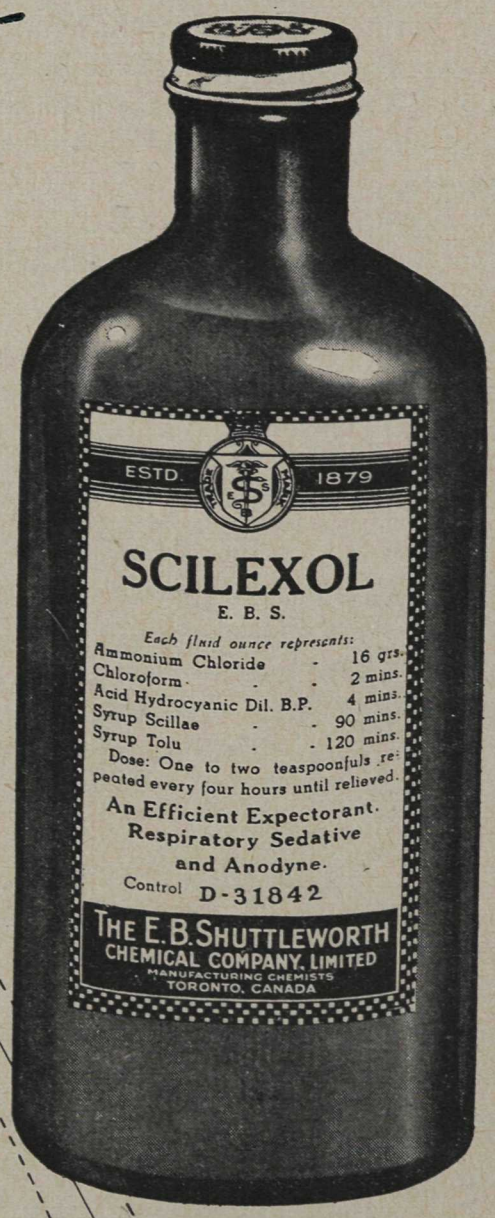

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VANCOUVER HEALTH DEPARTMENT

CASES OF COMMUNICABLE DISEASE REPORTED IN THE CITY

STATISTICS—NOVEMBER, 1950

Total Population—Estimated	385,500
Chinese Population—Estimated	6,877
Hindu Population—Estimated	133

	October, 1950	
	Number	Rate per 1000 Pop.
Total deaths (by occurrence)	355	11.1
Chinese deaths	19	33.1
Deaths, residents only	321	9.9

BIRTH REGISTRATIONS—RESIDENTS AND NON-RESIDENTS:
(Includes late registrations)

	October, 1950	
Male	441	
Female	431	
	872	27.1

INFANT MORTALITY—RESIDENTS ONLY:

	October, 1950
Deaths under 1 year of age	22
Death rate per 1000 live birth	36.2
Stillbirths (not included in above item)	8

CASES OF COMMUNICABLE DISEASES REPORTED IN THE CITY

	October, 1950		October, 1949	
	Cases	Deaths	Cases	Deaths
Scarlet Fever	23	—	8	—
Diphtheria	—	—	—	—
Diphtheria Carriers	—	—	—	—
Chicken Pox	22	—	17	—
Measles	31	—	22	—
Rubella	4	—	3	—
Mumps	38	—	23	—
Whooping Cough	35	—	2	—
Typhoid Fever	1	—	—	—
Typhoid Fever Carriers	—	—	1	—
Undulant Fever	3	—	—	—
Poliomyelitis	—	—	7	—
Tuberculosis	50	9	50	12
Erysipelas	3	—	1	—
Meningitis	1	—	1	—
Infectious Jaundice	—	—	—	—
Salmonellosis	1	—	7	—
Salmonellosis Carriers	—	—	—	—
Dysentery	1	—	—	—
Dysentery Carriers	—	—	—	—
Tetanus	—	—	—	—
Syphilis	22	1	24	5
Gonorrhoea	179	—	201	—
Cancer (Reportable) Resident	115	54	88	51

CONNAUGHT

NPH INSULIN

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□

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The Editor's Page

The recent announcement by the Government of Alberta that it intends to take over the licensing of those who desire to practise the professions—medicine, law, engineering and the like—cannot but cause in our minds considerable misgiving and distrust. This is especially the case, when one considers the reasons that have been given, namely, that the professional licensing bodies have abused their powers, and have witheld the right to examination and license from candidates who should have been admitted.

The fallacy of these arguments is not hard to expose. In the first place, however, we should like more information on the facts. The names, for instance, of those whom the Medical Council of Alberta has rejected—their reasons and so on. A recent editorial in the News-Herald referred to men of high attainments who had been rejected. Who are these men? Or is this just a *tour de force* on the part of the writer? Also, there was more than a hint that some men had been refused on account of their race or creed. Such a suggestion is unworthy of more than the comment that it is entirely untrue.

The bodies appointed under the various professional acts are, in one sense, an arm of the government of the province involved. Their duties are to administer the Act under which they work, to institute standards of professional attainment, of professional examinations, and through these to judge the qualifications of any candidate to be admitted to practice. Under the law, as it now stands, and has always stood, they have no other powers. If they abuse their power, and deny these privileges without cause, the right of appeal exists, and has before now been used.

Their standards by which they judge are the highest of the day—and on what other basis could any government adjudge the fitness of any applicant? We are told that any such applicant would have to satisfy requirements laid down by the University of Alberta. In what way would these be any different or less stringent than those laid down by the College of Physicians and Surgeons of Alberta, or the Bar of Alberta, or the Engineering Professional Act's regulations? Then where would these hitherto rejected applicants be any better off?

Nowhere, unless one admits a rather nasty application, namely, that political pull or influence might have an effect. And such political influence would have other, and evil, effects. The professions would be at the mercy of the political party in power—and it is easy to imagine conditions under which this might constitute a very great menace not only to the professions themselves, but to the public good.

While we can only speak, perhaps, for the medical profession, we believe that anything we may say will apply equally to the other professions—law, engineering, etc. What we wish to say is simply that these charges, if they have been made as reported, are entirely baseless and untrue. The applications of medical men to enter Canada and become practising physicians here are, and have always been, and always will be, judged on absolutely the same standards that apply to graduates from any Canadian university. Previous education, medical training, the source of this, and ability to meet the requirements of the Dominion Medical Council, are the bases of qualification, and apply equally to all. Till it has been shown that any unfair and unjust action has been directed against a fully qualified man, whatever his nationality, race, colour or creed, we shall not accept the charges made. And we believe that no such action has been so taken—in medicine certainly, and we believe the other professions have been equally fair and just.

We hope with all our hearts that this decision will be reversed. We believe it to be unfair, reactionary, and retrogressive—it will throw professional standards of practice into a political melting pot—it will lower such standards—it is quite unnecessary, and it will be harmful.

All this, too, makes us more than certain the action of the profession some weeks ago in altering the constitution of the B. C. Medical Association, and making it more truly representative of all those in the profession, was a wise and fortunate step to have taken. We cannot believe that the Government of British Columbia will follow the lead which has been set by Alberta, but political action is unpredictable at any time—and it is well for us to be thoroughly alert to the possibility. In this connection, we should seek to cooperate with the other professions—and with them, to plan concerted and united action. But primarily, we must look to our own organization, and make it strong and harmonious.

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CANADIAN ARTHRITIS AND RHEUMATISM SOCIETY

Dr. J. H. MacDermot,
Editor, "The Bulletin",
Vancouver Medical Association,
1701 West Broadway
Vancouver, B. C.

Dear Sir:

Will you please enter the following in the next issue of "The Bulletin"?

"In order to comply with the regulations in force at the new Out-Patients' Department of St. Paul's Hospital, the Canadian Arthritis and Rheumatism Society regrets that only those patients whose income is $75.00 a month or less plus $25.00 for each dependent can in future be accepted for diagnosis and treatment at the Arthritis Clinic at that hospital. Appointments may be made by the family doctor at the Canadian Arthritis and Rheumatism Society's office by phoning CEdar 5114.

For those whose income is higher than the specified amount, physiotherapy treatments may be prescribed through privately practising members of the C.P.A." Thanking you for your co-operation,

Yours sincerely,

MARY PACK,
Executive Secretary.

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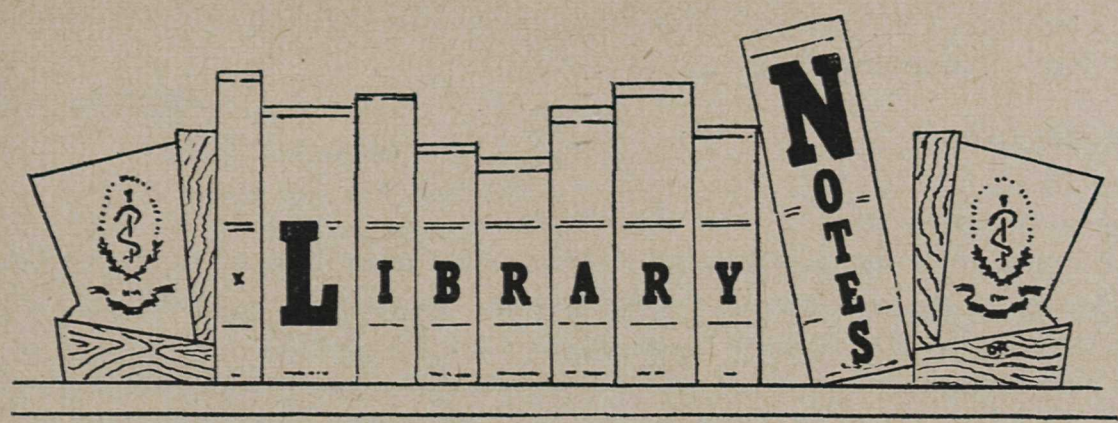

Library Hours

Monday, Wednesday and Friday	9:00 a.m. - 9:30 p.m.
Tuesday and Thursday	9:00 a.m. - 5:00 p.m.
Saturday	9:00 a.m. - 1:00 p.m.

Recent Accessions

American Medical Association, Transactions of the Section on Ophthalmology, 98th Annual Session, 1949.

Glasser, Otto (editor-in-chief)—Medical Physics, vol. 1, 1947, and vol. 2, 1950 (Historical and Ultra-Scientific Fund).

Hertzler, A. E.—The Peritoneum, 1919 (gift of Dr. W. D. Keith).

Hill, A. Bradford—Principles of Medical Statistics, 5th edition, 1949.

Maingot, Rodney—Abdominal Operations, 2nd edition, 1948.

Medical Clinics of North America—Symposium on (1) Infectious Diseases, and (2) Current Concepts of Pathogenesis and Treatment, November, 1950.

Meigs, J. V., and Sturgis, S. H.—Progress in Gynecology, vol. 2, 1950.

Or,, Thomas G.—Operations of General Surgery, 2nd edition, 1949.

Platt, Sir Harry—Modern Trends in Orthopaedics, 1950.

Rolnick, H. C.—The Practice of Urology, 2 vols., 1949.

BOOK REVIEW

THE BRITISH MEDICAL BULLETIN

To provide information on matters relating to Medicine, the British Council publishes the British Medical Bulletin, which first appeared in 1943 as an abstracting journal, adding one or two short review articles in the second number. Since that date, the publication has grown and today it reviews the important advances in British medicine. It is published mainly for the specialist and medical research worker, but others will find in the journal many interesting items. Recent numbers have dealt with New Currents in Biochemistry; Lactation—Function and Product; Chemical Carcinogenesis; Background to Chemotherapy; Congenital Factors in Disease; Mental Health and Mental Health Services and Neurophysiology. The publication is in two parts, the second section containing historical notes, annotations and news, reviews of medical books and films and a guide to the contents of all important British medical periodicals. The library of the Vancouver Medical Association receives the Bulletin regularly and it may be obtained on request to the librarian by all members, including associates.

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The following is a letter of thanks and appreciation sent to Dr. W. B. McKechnie for his recent donation to the library.

October 30th, 1950.

Dr. W. B. McKechnie,
Armstrong, B. C.
Dear Doctor McKechnie:

Once again, it is the privilege of the Library Committee to thank you most sincerely on behalf of the members of the Association for your most general gift of $100.00 to the library, which was handed to us recently by Dr. Keith.

The Committee agreed at a recent meeting that the money be assigned to the Historical and Ultra Scientific Fund, as was your last gift. The books bought from this fund form a special collection which is an important part of the library.

We cannot help feeling that your interest shown in the library is an inspiration and we hope that others will follow your example, especially with the advent of the Academy of Medicine building where the library is to occupy a prominent place.

Yours sincerely,

Secretary, Library Committee.
(sgd.) A. F. Hardyment, M.D.,

* * * *

Vancouver, B. C., 1st December, 1950.

Dr. J. H. McDermot, Editor, *The Bulletin*,
Vancouver Medical Association,
203 Medical Dental Bldg., Vancouver, B.C.

Dear Doctor:

Subject: Intravenous Therapy *by Registered Nurses*.

We have been advised by Miss Alice Wright, Executive Secretary of the Registered Nurses' Association of British Columbia, that early in 1951 the School of Nursing of St. Paul's Hospital will give a course on Intravenous Therapy to a small group of registered nurses. You will recall that last year the College appointed a special committee to meet with the Registered Nurses' Association and bring in recommendations with regard to this subject.

Miss Wright has requested that the list of drugs to be administered by nurses and approved by Council, be given publicity in the Bulletin in order that both doctors and nurses throughout the Province may be familiar with the recommendations of the Council of the College of Physicians and Surgeons.

Following is the list of medications for intravenous therapy by nurses which was compiled by this sub-committee:

A. *Intravenous Feedings*:
   1. Blood and plasma.
   2. Saline.
   3. Glucose solutions, not above 20%.
   4. Protein digest solutions (Amigen, Parenamine, etc.).
   5. Vitamins suitably prepared for I.V. Therapy—(Vitamin B. Complex, Vitamin C., Vitamin K.) (Not separate Nicotinic Acid.)

B. *Stimulants*:
   1. Coramine.
   2. Caffeine Sodium Benzoate.
   3. Purified Digitalis Derivatives—(Digoxin, Digitoxin).

C. *Other Drugs*:
   1. Insulin, only into an I.V. flask.
   2. Sulphonamides, only into an I.V. Flask.
   3. Heparin.

Yours very truly,

Lynn Gunn, M.D., Executive Secretary.

TREATMENT OF MARIE STRUMPELL SPONDYLITIS

A. W. BAGNALL, M.D.

Treatment consists of:—

I. Basic Programme.
II. Pseudo-specific Therapy.
III. Aids to Basic Programme.

Basic Programme.

(1) *Appropriate Rest.* Wage-earning ambulatory activity should be forsaken for combined rest and non-weight-bearing exercise, when

(a) Rheumatoid activity reaches such a degree that ordinary gainful occupation is not tolerated. Clinically, the best test for this is a rising sedimentation rate, a falling haemoglobin, and marked pain on prodding the erector spinae muscles with the thumbs.

(b) Systemic reaction to rheumatoid activity results in shrinking body height, impending flexion deformity of back, hips or knees, or

(c) Occasionally, swelling and deformity of peripheral joints such as feet or ankles demand that weight-bearing be forsaken.

Arthritic Aphorisms.

(1) Never put a spondylitic to bed without arranging for exercises to preserve maximal range of movement of spine and any involved peripheral joints—done at least once daily.

(2) A spondylitic, like any rheumatoid patient, must not be allowed to go to bed to vegetate, but to work hard on exercises designed to maintain and improve power of back and peripheral musculature—done hourly throughout the day.

(3) At any stage, the muscle-building exercises demanded of the patient should just fail to be sufficiently energetic to aggravate significantly his pain and disability.

(4) Any measure that is worthwhile to curb the pain is good because it will then permit "range of movement" and "muscle-building" exercises that otherwise would be impossible. Phenobarbital gr. ¼-½ Q.I.D. serves to increase cerebral pain threshold and peripheral nerve threshold to pain is increased by routine use of aspirin compound (e.g. 2 x Frosst 217 with each meal and with milk at bedtime—or enteric-coated sodium salicylate gr. x with each meal and 10-20 gr. at bedtime). Diminution of pain means less muscle spasm and more preservation of movement for more hours more days a week and therefore less restriction of movement as a result of the inflammatory process in any given period of time.

Deep X-ray Therapy. Clinically, there does not appear to be any curative action in deep X-ray therapy. There is little demonstrable effect on the primary inflammatory process—but rather, deep X-ray therapy acts as a prolonged anodyne—thus minimizing painful muscle spasm with its secondary restriction of movement. Spondylitis is subject to sudden and often severe exacerbations of painful restriction of movement—often these last but a few hours or days and X-ray therapy in such instances is not worthwile (Phenobarbital plus 217's suffice). When exacerbations persist longer than two weeks, particularly if there is acute restriction of important movement (e.g. of cervical spine), that does not respond to rest and the above symptomatic therapy, deep X-ray treatment is well warranted to eliminate unnecessary, permanent, spinal fixation. In the cervical region, sometimes diathermy followed by vertical (transitory 10-25 lbs. traction for 10-30 mins.) traction, with rotation exercises while in traction, will preserve function during the flareup—but if temporomandibular arthritis has occured in the past, much caution should be exercised with the traction.

When inflammatory muscle spasm does not resolve rapidly with complete rest in bed (more severe cases should not be allowed up even in wheelchair to bathroom or spasm recurs), it may be necessary to use Intocostrine—best preparation, if obtainable, is Introcostrine in oil. However, it has not been necessary in the past two years at Shaughnessy Hospital to use this to obtain the best results. Hydrotherapy (Hubbard tank), lowgrade fever therapy (in diathermy box or steam bath) may be substituted, all on the principle

that persistent heat relaxes spasm and permits the movement which is the objective of all treatment. Since significant contraction of fibrous tissue cells does not take place in less than 24 hours, range of movement may be maintained if maximal range is ensured by one or other of the above means once daily. Great care and supervision are necessary but, if provided, will assure that in only the most serious cases will the use of the term "*ankylosing*" spondylitis be appropriate.

Breathing Exercises. Respiration is affected not only by the intercostal fibrous tissue inflammation but by the rib-fixing inflammation around the costovertebral joints. Hourly deep-breathing exercises may be supplemented where necessary by passive exercises in the newer "plastic-lung respirators". In the acute stages chest expansion may become restricted to ½"—but if deep-breathing exercises are practised hourly, almost normal chest expansion may be regained in convalescence.

In convalescence, the patient is pushed to develop even better than average anterior and posterior spinal muscle power—thereby assuring that, to protect his affected inter-spinal joints from everyday strains on resumption of ordinary activity, more than average muscle power will be available.

It is an exceedingly important principle that if a spondylitic is protected until clinical rheumatoid activity is negligible, recurrence will be deferred for months, years or forever. If protection is continued only to semi-quiescence, reawakening to activity is infinitely easier as a result of minor physical or emotional strain. The sedimentation rate is not nearly as important in such an assessment in a long-standing case as is the clinical estimate and the obvious development of muscle-power. Anaemia is, however, a poor prognostic sign. It is typically normocytic, normochromic, does not respond to iron or liver. Much benefit in acute or severe cases may accrue from transfusions, if available.

Therapeutic "tricks" in M.S. Spondylitis consist of (a) X-ray therapy to persistently painful ischial bursae, or other bursae about the hip—in these the results are among the best offered by radiotherapy. (b) Occasionally, injection with novocaine (or long-acting Quinocaine) of the 12th costovertebral joint region will terminate persistent nagging or sudden excruciating "loin pain". (c) Deep X-ray therapy of those joints uncommonly involved in other rheumatic disorders—i.e., temporomandibular, sternoclavicular, manubriosternal, costrovertebral or costochondral may give excellent results—novocaine injection may likewise give good results so prolonged as to seem incompatible with the pharmacologic action of the injected anaesthetic.

It must be remembered that women cannot have their ovaries satisfactorily protected during X-ray therapy of the sacroiliac joints—ischial bursae and hip joints, however, are not such a problem. Any radiologist to whom one would send a second male patient for therapy will have protected the scrotum of the first with a lead shield. Radiologists overlooking such aspects in therapy of patients in the reproducing period should not be given a second chance. In the course of X-ray therapy, the most common complication is nausea—treatments may be so spaced as to reduce this to a minimum or Dramamine may be used prophylactically. Leukopenia from X-ray therapy is usually generalized, affecting equally the granulocytes and lymphocytes—the rebound is easy to normal count if therapy is stopped—a W.B.C. should be done after every 2nd treatment of 100 r (or more). Rarely should more than three courses (of 800 r) be undertaken to any one region of the spine in less than 18 months—and if continuous therapy is undertaken the results are usually disappointing.

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SOME RECENT ADVANCES IN PEDIATRICS NOT COMMONLY DISCUSSED

DR. H. BAKER

In any discussion of pediatric advances the tendency is to discuss the more obvious modern facts. The antibiotics, transfusions, anemias, etc., come in for their share of discussion.

To a large extent they are not advances in pediatrics. They are advances in medicine and sciences as applied to pediatrics. The modern trained pediatrician can treat the sick child better than the physician who treats adults also, but in a sense this is really not practice of pediatrics in itself. The practice of pediatrics should embrace a complete understanding of the development of the infant from birth to adulthood. Actually the pediatrician uses this knowledge in the understanding of the sick child. It is this understanding plus the modern therapeutic methods that make for the successful handling of the sick child.

Let us go into lesser known paths of pediatrics.

1. For decades the child from the broken home and the child without parents has been put into an institution for care. They bear various names. The commonest one is orphanage. In the past there have been many types, good and bad and in-between, which served a purpose. No doubt they turned out many good citizens. They were no substitute for home life. I think the more recent use of foster homes is a great pediatric advance. It is a real step forward in salvaging children by the sheer application of the understanding of the needs of the developing child. Among other factors the developing child needs security and above all a feeling of being wanted for himself as an individual. Institutional care of a normal child falls far short in this regard. They usually fulfilled the acceptance of the child as part of a group but not as an individual for himself. The lack of fulfilment of this important factor makes for an individual who cannot as a rule develop fully, emotionally. This can produce a very crippling emotional defect in the future.

2. Before the work of Gesell was begun there was no concerted effort to understand the development of the child. Through the centuries parents, doctors and philosophers had made certain statements with relation to children. Many of these were untrue, some were based on superstition, or prejudice and ignorance. There were truths in some of the beliefs, but they were isolated facts which did not make any organized pattern such as had been given to us by Gesell and others who are studying children objectively.

This material by itself is of no value. Its application by people practicing pediatrics is just as important. This is just getting underway. Gesell's material and methods are a recent advance. Their application is not yet an advance. It has barely begun. One can look into the future and see the change in the handling of children, when these already known facts are used by doctors. Gesell has recently pointed out that in the development of the normal child not only are there physical and mental changes but also emotional ones. Unless one understands these to be normal there is a tendency to label them as having a psychiatric taint. He points out that they are pediatric problems which should be recognized by the pediatrician for what they are and thus kept in their proper place. They are not psychiatric problems. He states that a proper understanding of the development of the child in its various facets will eliminate the seeming need of more psychiatric training of the pediatrician. This is an advance in pediatrics.

There is a unique recent advance in the understanding of children. Gradually, as doctors we are giving up the method of handling children as laid down by the behaviouristic school. Based on the mechanistic approach of the animal laboratory the behaviouristic school of child psychology was evolved. We, as doctors, have much to answer

for in having allowed ourselves to accept and apply this method of study of child development. Its weaknesses soon became evident and it has gradually lost favour. The doctors who applied this method of child study and practice gradually realized that children are not just bundles of reflex arcs. As this became apparent two positive methods became more obvious. The first was the previously mentioned work of Gesell which was gaining momentum. The second was the application of psychoanalytical methods in the understanding of child behaviour. This is another great recent advance in pediatrics. The most productive force has been in the field of play therapy. The probing of the deep chaotic forces of a psychotic adult is done by certain well established methods. It soon became apparent that in children they did not work. There have evolved the various play techniques for the unleashing of the individual problem of unhappy children. Similarly there is just coming to the fore the concept that some children can work off their unhappy states in special homes such as the Ryther Institute. In homes of this type understanding adults allow the children to work off the pent-up emotional states over a period of time. Many Ryther institutes will be built when their true value becomes apparent.

Even a cursory evaluation of the foregoing remarks will show that the emphasis has been placed on an understanding of the development of the child, especially the emotional facet. Some authorities feel that this is the only really true pediatrics. It is becoming more apparent that in the years to come the general practitioner will be in a better position to take over the care of the sick child. In spite of this there will always be the place for the pediatrician in the handling of the sick child because of his special knowledge and training. However, the pediatrician in the future will have to know more of the development of the child in order to hold his place. There is a great deal of work going on to provide this knowledge.

In this whole discussion the author has restricted himself to advances which affect pediatrics primarily. It is obvious that the value of good social service work affects the progress of the whole field of medicine and surgery. It effects the field of pediatrics so forcefully that it must be considered a special advance in pediatrics.

The social worker's approach to the handling of children's problems is a real advance in pediatrics. At present there are not enough of them. Based on past practices many are still asked to do work which a well trained admitting officer should do. It is a waste of good manpower to keep a social worker from the type of work which he or she has been so well trained to do in pediatrics. Their growing place in the practice of pediatrics is a large one. Its appreciation has only become apparent in the past few years. This is an advance in pediatrics.

These few points emphasize the highlights of some advances in pediatrics which are not commonly stressed. Actually they are single parts of a large allover pattern of the study of children. They show a very healthy trend in pediatrics. As they each in turn blossom and begin to produce fruit the crop will be very valuable. Each of the above stressed factors represent a lifetime of study and, of course, cannot be enlarged upon in a short paper like this.

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GENERAL PRACTITIONER AND OPHTHALMOLOGIST THEIR COMPLEMENTARY RELATIONSHIP

By MEYER WIENER, M.D., *Emeritus Professor Clincial Ophthalmology, Washington University Sch. of Med., St. Louis.*

This is a subject so broad and inclusive that I shall attempt to cover only a few things in detail, rather than treat the whole subject in a most superficial way.

Uppermost in my mind is something rarely stressed. I mean by that, what one expects from the other when a case is referred for a report as to general findings. I do not mean the exceptional case, but those falling in the ordinary category.

It has not been unusual for me to receive a report from the medical man, when asked for a report for a workup on an eye case, that his heart, lungs and urine are normal. Nothing more. I must admit that such a report is just as often the fault of the ophthalmologist in not telling the internist the details of his own findings and at least suggesting just what type of information he would like to obtain.

It is the duty of the ophthalmologist to send him his findings with his suspicions and suggestions of the various possibilities as to causes, so that when the internist begins to examine the case, he may at least have a clue as to how he shall proceed and what he is to look for. What is usually wanted is not only the prevailing report including urinalysis, blood pressure, blood Wasserman, etc., but careful search for focal infection, sensitivity to food or external irritation, or a test for tuberculosis, brucellosis, or whatever the ophthalmologist may suspect.

When the suspected tuberculosis is intraocular, the internist must be warned of the possibility of grave danger to the eye should the patient be unusually sensitive to tuberculin, and cautioned that the initial dose must not be more than 1/10,000 of a milligram. I have seen a terrific reaction from a smaller dose than this, seriously endangering the safety of the eye.

I am not giving my fellow oculists a clean bill by any means. Too often their reports are sorely lacking in essential details. When, for example, a case is sent to us for examination to help clear up a situation, the practitioner cannot and must not be satisfied with a report that nothing abnormal was found. I have often seen such reports. Again, I have seen reports that choked disc was present in each eye, measuring so many diopters in one and so many in the other. Nothing more. The central vision, fields of vision, both central and peripheral, should be included in every case suspected of having increased intracranial pressure, even though they may seem to be perfectly normal. A detailed description of the fundus of each eye, describing media; size, colour and outline of the disc; systematic search for hemorrhage and exudates, their type, size, depth and location and number. This is most important in view of subsequent examinations to follow, as it is impossible to recall these details from memory. Lastly the size, colour and contour of the vessels. This is of double importance, since the follow-up may not be made by the same examiner.

A report is not complete without comment, interpretation and recommendations. I believe that all of these things can be brought about by a better understanding of what one wants from the other and the determination of both parties not to be satisfied with, nor to accept inadequate reports, one from the other.

There are times when it becomes necessary for the practitioner to have at least a basic knowledge of diseases and abnormalities of the eye. However, unless he is acquainted with what constitutes the normal it is not likely that he will be able to recognize what is abnormal.

The pupil, for example, not only varies in size under different conditions of light, but changes with the emotions and with accommodation, with age and with sleep. The newborn infant's pupil is small and responds very little to light. In youth it is large, and responds quickly and extensively to light and accommodation; whereas in old age it reverts to type and becomes very small again. This has a most important aspect

which I shall mention shortly. Our professor of medicine used to tell us that if we wished to note the reaction of stimulation of the sympathetic, to tickle one's girl under the chin and watch her pupils dilate. *

During sleep the pupil is very small, just as in the first stage of anesthesia, the eyes are rotated up and are divergent, and the conjunctival vessels are engorged (owing to vaso-motor change); while during feigned sleep the pupils are large, the eyes parallel and the conjunctival vessels normally bleached. These are just a few exampls of how the tissues and organs may vary under different, non-pathologic conditions.

The iris varies in the amount of pigmentation in the various races and in blondes and brunettes of the same race. It may change under certain pathological conditions, but this can always be differentiated from the physiological change. All babies are born with blue eyes, but the color may change within a few hours or days. The width of the palpebral fissures and the shape of the inner canthus and slant of the fissure may vary considerably in different races. What is normal for one race may not be for another. However, the two sides must be approximately alike. I say approximately in a guarded manner, for the two sides of a person's face are never exactly alike. The artist knows this when he paints or photographs your likeness.

Even the size of the eye varies with individuals. The eye at birth measures about 17.5 mm. and is quite flat, or hyperopic. It rapidly elongates and assumes a more or less spherical shape. Sometimes it forgets to stop lengthening and we then have progressive myopia. It now seems to be generally admitted that the greatest factor in progressive myopia is heredity.

Before taking up the subject of what the man in general practice is able to take care of in ophthalmology, let us discuss the systematic, routine method of examination to which he should subject that patient, before he decides that it is a case for him to handle. You may easily realize that unless he is aware of the possible pitfalls into which he may stumble, he will be unable to determine the type of case he may safely treat.

The first essential is a good light. The general appearance, gait, expression, color of the skin: all may have a bearing on the eye condition. One first looks at the width of the palpebral fissures, external muscular movements tested, the tear sac expressed (and it is essential that it be expressed properly). Then comes the feeling of the intra-ocular tension. If this were done as a routine, and I do not exclude ophthalmologists, the number of cases of blindness from glaucoma would be reduced considerably.

Examination of the lids, character of the skin, lashes and conjunctival surface. Those engaged in public health and school work must know how to expose the retro-bulbar folds. Next comes the bulbar conjunctiva and lastly, the cornea. The conjunctiva can tell us a lot, the colour, extent, depth and location of the injection, and may be a clue to foreign body or ulcer in the cornea, inflammation of the iris, foreign body in the punctum. Subconjunctival hemorrhages have little significance except in children.

I need not tell you that the eye lesions of the acute exanthemata are among the earliest to appear. I assume that you have been taught that patients afflicted with measles should be shielded from the light; at least that was formerly an axiom. Many years ago I discovered the opposite to be true, and now recommend that the room of a child with measles be flooded with light. Light is a great healer and, while it may hurt the eyes for a little while, it does not harm them. In addition, we use very thin, moist, cold compresses over the closed lids and permit the children to read, look at picture books and play games.

There is no good reason why you should not remove foreign bodies from under the lids and even when imbedded in the cornea, under ordinary circumstances. Be sure that everything is clean. When digging it out, don't try to transfix it, because, if it is an iron scale or every, it is quite fragile and will break into minute pieces. Dig it out from the side as though you were lifting out a stove lid, and be sure to remove it all. When finished, dust in some Xeroform powder, which is an impalpable, non-irritating antiseptic powder which clings to the surface. Besides, it is slightly anaesthetic.

I do not advise a bandage or pad for several reasons. Penicillin ointment helps prevent infection.

When a patient presents himself immediately after a lime or lye burn, or acid burn, first aid is to get rid of the irritating substance as quickly as possible. If it happens to be a child, put your hand over his nose and mouth and hold his eyes under the bathtub faucet, turned on full force. Similar modified treatment is applied to the adult. If the burn is superficial, apply cold; if deep, apply heat.

Acute conjunctivitis will generally respond to cold compresses and is usually self-limited and gets well often quicker with no treatment. I am not in favor of a darkened room for inflammatory eye conditions. This is usually considered heresy by most ophthalmologists. Light is a great healer. The tears contain a natural enzyme which is antibactericidal. If you dilute these with drops or with eye-cups too much, the favorable effect is weakened. Besides, blinking both bathes and cleanses and stimulates the lacrimal glands to further secretion. That is one reason that I do not like bandages or dressings.

Most men, even oculists, prescribe yellow oxide of mercury ointment for marginal blepharitis. It is really about the worst thing one could give, as it is insoluble in about everything and is quite irritating. If one wishes to prescribe mercury, use 2% ammoniated mercury ointment; or, if the lashes are infected with crab lice, use mercurial ointment. It is not always what one uses as much as how he uses it.

Blepharo-conjunctivitis due to the Morax-Axenfeld bacillus is cured with zinc ointment and zinc drops. It is recognized clinically by cracks in the skin at the outer canthus. In using ointments, it is essential to soften the crusts on the lid margins first before gently removing them and then applying the ointment. In ordinary marginal blepharitis it is also necessary to get rid of dandruff of the scalp to effect a permanent cure.

Hordeola, or styes, should be punctured with a quick stab of a very sharp knife or needle, followed by use of hot compresses. If the styes are recurrent, they can usually be brought under control by prescribing Dilute Sulphuric Acid, U.S.P. 30 drops in half a glass of water taken with meals three times a day. It should be taken through a straw or tube to protect the teeth.

Chalazion, or Meibomian cyst, should have a crucial incision on the conjunctival side, followed by thorough curetting with a small, toothed curette. If one then trims off the points of the triangles with a small cuticle scissors, the opening will drain and heal without further treatment. This procedure can be accomplished without any pain by instilling a drop of 2% pontocain and then injecting a few drops of 2% procain, to which a drop or two of adrenaline has been added, into the retrotarsal fold.

Some of you who are doing public health or school work are smetimes called upn to pass upon a case suspected of being trachoma. Naturally, when a trained ophthalmologist is available, he should pass final judgment. Briefly, one can differentiate between follicular conjunctivitis and trachoma as follows. Both may be either acute or chronic. In trachoma the follicles are more numerous in the upper than the lower retrotarsal fold; in follicular conjunctivitis the reverse; in trachoma, always pannus, following conjunctivitis none: in trachoma the continuity of the blood vessels passing over the follicles is broken; not in follicular catarrh; in trachoma, nearly always a history of trachoma in the family; none in follicular catarrh; besides, in the latter, adenoids will usually be found. Naturally, the diagnosis is clinched by microscopic findings from scrapings.

In this automobile age every physician comes across some cases of injury to the eyes and eyelids. Unfortunately, eye cuts, especially across the cornea, are not always easily recognized. A fresh cut, even across the entire cornea may evade recognition. I would therefore urge every doctor who comes across an eye injury to instill a drop of 2% fluorescein in any case where windshield glass has been broken, even though the patient does not complain of his eye at the time.

All of you know that with the shock accompanying injury, one feels little or no

pain and one can often repair wounds immediately after an accident without anaesthesia with the patient feeling no pain. If there be a cut or scratch on the cornea, the fluorescein will stain it yellowish green so that it cannot be mistaken. Fluorescein is also very useful to determine the depth and extent of an ulcer of the cornea. Sometimes, when the patient lives at a distance where it is not practical to see the oculist as often as he should be seen, the practitioner treats him between times and gauges the progress of the ulcer through staining.

In this progressive age all doctors are taught the use of the ophthalmoscope as an aid to diagnosis, as well as to prognosis. There should be a systematic routine method of examination as well as that of the external examination of the eye, of which I have already spoken. In order to secure a satisfactory view of the macular region, especially in those past middle age, it is necessary to dilate the pupil with euphthalmine or some other mydriatic. Having observed the state and reaction of the pupil before dilating, one sits at a distance of about a foot, throws the light into the pupil and observes whether the media are clear or not. If clear, a red reflex will be seen. Otherwise, one can determine whether the opacity is in the cornea or lens by throwing the light in from the side, holding the light close to the eye. Incidentally, this is a good way to look for a foreign body in the cornea, or a small corneal lesion; or to detect a very fine nystagmus.

The next step is to throw the light in the patient's eye with the ophthalmoscope as close as possible without touching it. With the patient looking straight ahead, the observer directs the light a bit to the nasal side of the patient's eye, when he will observe the optic disc. It would take more than the time at my disposal to describe all of the variations of the normal disc. However if he acquaints himself with the usual run of cases he will not stray far. The size, shape and color and outline should be observed and recorded. Also, the surface makings, excavation and immediate surroundings. We now begin a systematic search for hemorrhages and exudates. Since these are found where one would naturally expect to find them—namely along the vessels, we begin at the disc and trace each one of the four main vessels and their branches as far out as possible. Last, we describe the size, colour and contour of the vessels and any unusual manifest appearance.

One of the first things we observe in arteriosclerosis is the change in calibre of the retinal vessels. Following a small artery, we see it alternately become smaller and larger in width. Small, flame-like hemorrhages appear. These are superficial. The tiny, round, deep ones appear later. As the arteries become harder, the veins become compressed at the crossings. The vein will always cross at right angles to the artery and then resume its regular course. The small hemorrhages are usually found in the region of the disc. Later, they may be found anywhere. The central light streak in the arteries is an early manifestation.

Medical men practicing in outlying districts, who, for obvious reasons, must take care of some cases of iritis, often inquire how they can protect themselves from mistaking glaucoma. Sometimes it is very difficult. The case may start out as a simple case of uveitis and then develop an increase in tension. Our answer then is for them always to be on the lookout for glaucoma, even though the case starts out as a simple, uncomplicated case of iritis. In iritis, the pupil must be kept dilated. Not that atropine has any curative effect, but it puts the iris at rest and prevents adhesions of the pupil to the lens.

In treating a case of iritis, the tension must always be watched. Always compare the give, or feel of one eye to that of the other, just as you would compare the limbs in treating an arm or leg. In iritis, the anterior chamber is generally of normal depth; whereas in glaucoma the iris is pushed up toward the cornea, making the chamber shallow. In iritis, the more severe inflammation, the more difficult it is to dilate the pupil. In glaucoma, it dilates without the use of a mydriatic. The pain in glaucoma is usually even more severe than in simple iritis and the vision will most likely be more impaired. If at all in doubt, send the case to the oculist immediately, for these are cases difficult even for the oculist to handle.

We are often asked the question by students: What is the indication for the use of atropine and when is it safe to stop using it? The indication for atropine is pericorneal injection, which means iritic irritation or inflammation, provided the tension is normal. For it always means inflammation of the cornea or iris, or both. When the pericorneal redness has disappeared, there is no further use for atropine.

Occasionally, the patient consults his family physician, especially in the country, and is told that he has cataract, that it is not ripe or ready for operation, as he still can see to get around, and that he must wait until it is "covered", before it is ready for operation. Often he is right. The patient has cataract and his advice is sound. On the other hand, the patient may have glaucoma simplex, with or without cataract, and waiting until the "cataract" gets "ripe", or until the patient can no longer see may mean permanent blindness for him when it might have been avoided. His is the type of case where the patient can be helped if the case is caught and treated early; whereas waiting means eternal blindness.

In uncomplicated cataract in an old person, the pupil is small. In simple glaucoma the pupil is large, regardless of age. This, to my mind, is the most important single factor in the early diagnosis of glaucoma in advanced years for the man in general practice; and such a case should always at least be under suspicion. In glaucoma the anterior chamber is usually shallow. Not in cataract. In glaucoma the tension is hard compared to the feel of your own eye. In cataract it will feel about the same. There will be field defects in the glaucomatous eye and none in the cataract.

How do we know, in a case of mature cataract, whether it is operable? By taking the fields. This is done by having the patient close his eyes and throwing the light into the patient's eye from all angles to determine whether he can see the light from all directions. The further away the light is held, the more delicate the test becomes. If while throwing the light directly into the eye the patient sees a black spot in the centre, it would indicate that he has a defect in his central retina.

In closing, let me stress the fact that the eye is only one of many parts of the body and that it cannot be treated without considering the body as a whole. Just the fact that a man has a plus Wasserman does not necessarily mean that his eye trouble is due to syphilis; for a syphilitic may have any acute or chronic infectious disease, or deficiency disease, as well.

I would not think of treating a case of interstitial keratitis due to syphilis with anti-luetic treatment alone. If I did, I would probably soon lose my patient because he would not get well; or, at least, not for ages. They must all be built up with tonics and proper feeding. Cod liver oil, combined with the anti-syphilitic measures, cures them. The same holds good for phlyctenular kerato-conjunctivis and other eye conditions. This is where we need the practitioner to help us. Their diet must be well regulated; they must be fed the proper food; and at regular intervals; and they must have sunshine. We tell the parents to lock them out of doors. This type of patient always wants to get into a dark corner and cover his eyes, which, in my experience, is the worst possible thing to do.

We won't touch upon vitamines or deficiency diseases as that would get us too involved; but we realize now that not only are some of the diseases which formerly baffled us due to lack of vitamines, but even over-supply of vitamines. This is one of the reasons why we have laid so much stress on treatment of the patient as well as the disease.

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WHAT SHALL THE MAN IN GENERAL PRACTICE DO IN CASE OF EYE INJURY? AND HOW FAR SHALL HE GO IN TREATING EYE DISEASES AND DOING MINOR EYE SURGERY?

By MEYER WIENER, M.D.

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Before discussing what the man in general practice shall do in the way of treating eyes, we cannot lose sight of what he may do in the way of prevention. When one in the family has an infected eye, not alone should he be cautioned to use a towel for his exclusive use, but that he must wash his hands every time he touches his eyes so as not to convey the infection to others in the house.

Children should not be given sharp instruments to play with. Scissors used to cut out paper dolls, etc., must have blunt points. Guns, loaded or unloaded shall never be pointed at another. In the light of our present day living, this is almost impossible to carry out.

Those men doing industrial work, in the absence of an ophthalmologist on their staff, should insist on a preliminary examination of the eyes and record the vision of each and every employee, see that they wear protective glasses or goggles where indicated; take measures to prevent electric ophthalmia and see that machines are properly guarded against flying particles. Training of personnel is also of utmost importance.

Chemical burns, either acid or alkali, should be given immediate treatment by forcibly flushing out the eyes with water. The hand is held over the mouth and nose while the eyes are held open under a faucet or hose, flushing out all foreign material. If this is done immediately, relatively little permanent damage will be done. Acid burns are not nearly so serious as alkali, as the latter penetrates into the tissues and continue to do damage. If the burn is superficial, use frequent cold applications over the closed lids. If deep, use heat. Don't be deceived into thinking a burn not bad because there may be no ciliary injection. The cornea may remain clear for several days and then suddenly drop out. These are the bad ones and a bad prognosis must be given. Flash burns are usually not serious and get well with rest and cold applications.

Powder burns are best left alone for a few days, as trying to remove all of the particles sometimes leaves more scars than if they are left alone. I recommend waiting to see which ones irritate and then remove only those. The same applies to other non-irritating substances.

In cases of auto injury where glass has been broken, do not be satised with a cursory examination of the eyes but instill a drop of 3% fluorescein into the eye and then wash out with water or saline. If there be a cut or scratch it will be stained green. If you suspect that glass may have penetrated, or any other foreign substance, and X-ray is indicated, try to get some pieces of the glass so that they may be laid alongside of the X-ray plate. Some glass containing more lead will show very easily on the plate. If the sample doesn't show, then a negative finding on the plate means nothing.

We have seen children and adults with a load of bird shot in both eyes. We generally have them X-rayed and attempt localization; but seldom attempt to remove them, as we may do more damage than by leaving them alone. Intraocular foreign bodies, even suspicion of them, must be sent immediately to the ophthalmologist, as early removal is of vital importance.

I see no reason why the man in general practice, providing there is no qualified ophthalmologist available, should not remove foreign bodies from the cornea. Use two or three drops of 4% cocaine, or ½% pontocain with one drop of 1/1000 adrenalin. Then don't try to dig out a scale of iron rust or emery by transfixing it in the centre;

for it will crumble and then you will have several piece instead of one to remove. Push the spud on the edge of the foreign body, then under and try to lift it out as you would a stove lid. Be sure to remove the ring of rust as well as the foreign body. Dust in some bland antiseptic powder, such as xeroform. Or you may use one of the antibiotics to prevent infection.

When the face and skin around the eye is badly lacerated, unless you have all the necessary facilities at your disposal and plenty of time, do not attempt to sew up the wounds, but get the patient to a hospital where everything you need is available. Many cases of plastic repair can be prevented by proper first aid.

If there be a penetrating wound from a sharp instrument such as knife or scissors and the iris is prolapsed into the wound, after flushing out the conjunctival sac with force, cut the iris close to the cornea. It is safer to excise it than to take chances of infection by trying to replace it.

Marginal blepharitis may be safely treated by you. Two per cent ammoniated mercury ointment will control most of these provided it is used properly. It is not so much what is used as the way it is used. First, get rid of all the crusts by soaking with warm water and then gently brushing them off. The salve will not soak or penetrate through the crusts to reach the inflamed part of the lid. Then have the patient close the eye and tell him to take a very little on his finger, rub the thumb and finger together until there is just enough to make the finger look wet, and rub into the margin of the upper lid. Then have the patient look up, and do the same with the lower lid. A little stimulates. Too much irritates. Also, be sure to treat the seborrhoea of the scalp.

Recurrent styes or hordeola can be controlled by giving the child 30 drops of Dilute Sulphuric Acid, USP., in half a glass of water with meals. It is taken through a straw or glass tube.

In order to remove a foreign body from the upper lid, where it usually lodges, it is easier to relax the lid by telling the patient to close his eyes gently and then evert it, than the usual way of telling him to look down. Try it.

In instilling a drop in the eye, it is much easier to have the patient look up and then drop it on the eyeball. Capillary attraction takes it immediately all over the conjunctival sac. In treating an infected meibomian gland (chalazion) instil several drops of pontocain, then, with a fine hypodermic needle, balloon out the retrotarsal fold just beyond the infection and this will thoroughly anaesthetize the area so that it can be opened and curetted without the patient feeling any pain whatsoever.

In new-born babies, secretion will sometimes be found in the tear sac. If this is expressed properly and often and started early enough, most of these are cured in a short while. If not they should be sent to the ophthalmologist. Dacryocystitis in the adult lies in the sphere of EENT men.

Most cases of acute conjunctivitis are self-limited and will get well without treatment just as fast, or sometimes faster than with treatment. The patient can be made more comfortable with frequent cold applications over the closed lids. I have already spoken to you about this in the treatment of conjunctival irritation in the acute exanthemata and also about flooding the room with light.

I have had men in general practice treat cases of corneal ulcer when they lived too far away or could not afford to stay in the city. This, however, only under direction. The same holds good for inflammation of the iris. How does the physician know whether the case is one of inflammation of the conjunctiva or whether the iris is involved? In conjunctivitis the redness is greater in the periphery than immediately surrounding the cornea. It is also a brighter red. The complaint is generally of irritation rather than pain. The pupil is normal and reacts promptly to light. The eye is not sore to the touch. In iritis, the congestion is pericorneal, it is darker,, because of its greater depth, there is pain in the eye and often headache, the pupil is small and does not react to light, or faintly. If the case has gone on for a long time there will be adhesions of the iris to the lens, making the outline of the dilated pupil irregular.

I do not think that the practitioner should treat iritis unless an ophthalmologist is not available. Then he should dilate the pupil with atropine, if it can be dilated, and send him to the nearest eye doctor. Sometimes all of these signs of iritis are present in acute congestive glaucoma, except that the pupil in this case is dilated and the pain much more intense. In this case, atropine can do irreparable damage.

Sometimes a patient comes to the practitioner with cataract and wants to know whether it is ripe for operation. It may not be cataract; or it may possibly be cataract complicated by chronic glaucoma. He can generally tell this, as in uncomplicated cataract, which generally afflicts the aged, the pupils are small; whereas whenever one sees an aged person with unusually large pupil, he must immediately suspect glaucoma and send him to the ophthalmologist. This is not invariably so, for we do see people with high blood pressure with large pupils also.

When you wish to examine the fundus of a patient, it is almost always necessary to dilate the pupils so that we may easily get a good view of the entire fundus. This is best done with either a couple of drops of 10% neosynephrine or 5% euphthalmine. When the examination is complete, the pupil should always be contracted with pilocarpine, especially in adults. Euphthalmine 5% is preferred by some as a mydriatic.

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ANSWER TO SOME QUESTIONS ABOUT EYES ASKED OF THE GENERAL PRACTITIONER BY HIS PATIENTS

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Does it hurt the eyes to read by poor light? It may hurt them, but it doesn't harm them. It is unquestionably a strain on the eyes to read in either a poor light or too strong a glare; it may make the eyes red or feel irritable, but it cannot do them any harm. Abraham Lincoln read by the light of the fireplace, and one has never heard of him having had trouble with his eyes. The eyes may tire and may not have the same efficiency and endurance with improper light. This has been proven in industry; it has been found that there is a definite slow-up in sorting mail in the Post Office Department with insufficient light. Also that industry is slowed and there is an adverse reaction on the nervous system in many workers who do not have the proper lighting. This applies to glare as well as to insufficient light.

ARE EXERCISES GOOD FOR THE EYES? There is never a moment during the waking period when the eyes are not moving; that is, when the eye muscles are not being exercised. Even when we think that we are looking fixedly at a given point, the sensitive, fast moving camera discloses that there is a constant, rhythmic movement of the eyes not noticeable to the unaided eye. Hence, the so-called "rhythmic movements", or "rhythmic exercises" advocated by the late Dr. Bates, known as the Bates System, is a tricky fraud on the face of it, devised merely to extract the shekels from a guileless public. Naturally, there are definite exercises we use to develop certain muscular weaknesses, but these must be done with apparatus which will eliminate the opposing muscles from equal action so as to change their relative strength. Of course, this is only one of the many schemes practised by Bates' followers, and it would not be so tragic if this were all; but too often valuable time is lost in certain cases where prompt and efficient treatment or operation might have prevented much pain and suffering; and in some cases, blindness itself avoided.

DOES OVER USE OF THE EYES HARM? It does, in the opinion of many authorities: but I personally, have never been able to figure out how. The normal eye can be used for close work all day and day after day and year after year without doing any damage

to its function in any way. This is proved by the watchmakers of Switzerland, who have eyes no different from other people's who do not use their eyes for close work at all. Many ophthalmologists feel that over-use of the eyes for close work has a tendency to produce near-sightedness, or myopia; or to increase the amount or degree of the myopia already present; but I do not subscribe to this premise and have many reasons for discarding it. I do feel that indirectly, this may have an influence: Not by the use of the eyes *per se*, but through the child reading overtime when he ought to be out of doors exercising and improving his health. This, however, is an academic question that could be discussed for hours.

My eye doctor has prescribed glasses for me and insists that I wear them all the time. I don't like glasses and would like to wear them for reading only, or for picture shows. Will it injury my eyes to go without them? I do not think so. If a person is farsighted or has astigmatism he may have headaches or his eyes may burn from not wearing his glasses enough; or, he may have other reactions such as nervous ones; but going without his glasses cannot do the eyes themselves any harm, aside from the discomfort he may experience and making them red or irritable. If he is in good physical condition, he can overcome a fairly high refractive error without experiencing any symptoms whatsoever.

Doctor! Do you think I am getting a cataract? The patient often asks this question of his physician and expects him to answer it. Well! He cannot, but must tell his patient to consult his oculist. However, there are some cases where the lens is obviously dense from just a casual glance or examination. When a person has cataract, I believe that he should be told. There are many ways of telling a patient the same thing and the doctor must understand his patient in order to know just how to break the news. In some cases where we know the patient to be nervous, we may tell him that he has a cloudiness in his lens which is not of a serious nature and that, should it get worse, it can easily be removed. We can always explain to someone in the family the exact nature of the trouble. A very serious question sometimes arises as to whether the cataract is uncomplicated. Even a competent oculist cannot always tell this off-hand; but sometimes the general practitioner can be of immense help to the patient by observing the condition of the pupils. We know that the size of the pupils varies with age. When the baby is born the pupils are very tiny and react very little to light. In youth they are very large, while in old age they revert back to type and again become very small. This is of great importance, for if we see a man who has cataract and he has unusually large pupils, we immediately suspect glaucoma, feel the tension and look for other suspicious signs. Of course, he should be sent to the ophthalmologist immediately, even under mere suspicion, for the time element in treating glaucoma is of vital importance.

And while we are on the subject of pupils, aren't you sometimes asked by a patient: *Doctor! look at my pupils; how big they are.* We know that the size of the pupils vary with and under many normal conditions. We have just mentioned age. It varies with the amount of light; also, whether the eyes are focussed for distance or close; and with the emotions. My old teacher in medicine used to tell the class that if they wanted to see the effect of stimulation of the sympathetic just to tickle their girl under the chin and watch her pupils dilate. Don't forget, either, that the drug you are prescribing may affect the size of the pupils. Here again, enlarged pupils, in a patient predisposed to glaucoma, can bring on an acute attack. In a survey of the blind made in Pennsylvania, it was found that more than 11% were blind from acute or chronic glaucoma. There is hardly any excuse for anyone going blind from glaucoma if it is discovered in time.

One of the most frequent questions asked by a nervous patient when his eyes are involved is: "*Doctor! Am I going blind?* Fortunately, the usual answer can be *No*, because there are very few eye diseases which cannot be controlled if caught early. When it happens to be a case of cataract, although the lens may become cloudier and gradually result in blindness in that eye, we can reassure the patient that one eye almost always develops faster than the other so that it can be taken care of before the second one

becomes blind. Or, should they progress at about the same time or rate, that he does not have to wait until he is blind to be operated upon. The answer to the question as to when they will be ready for operation is this: Whenever the time arrives that the loss of vision *seriously* interferes with the patient's daily routine of life, that is the time for operation. We do not have to wait until the cataract is mature.

It is not unusual for the patient to walk into the office and say: *Doctor! I have granulated lids.* On examination, a simple case of inflammation of the lid margins is found with accumulated crusts. This is not serious, of course, and quickly responds to treatment. True granulations, or trachoma, is entirely different and fortunately is being eliminated in this country except for a few restricted areas and among certain Indian tribes. Don't forget that this marginal blepharitis is usually associated with seborrhoea of the scalp and will not get well, or stay well unless the scalp is treated (Resorcin in alcohol.)

Why is it necessary for me to have drops put in my eyes to dilate the pupils in order to have my eyes tested for glasses? They will tell you that they know ever so many people who have gone to doctors and been given glasses without having the pupils dilated; and many more who have gone to their optician, who never use drops. It is true that a very satisfactory examination can be obtained in most adults without the use of a cycloplegic. There are, however, certain cases, even in patients past 40 years of age, who are unable to relax their accommodation so that they can be refracted satisfactorily and who will require a mydriatic. It is seldom that one can secure a good result in children without dilating the pupils. People have been frightened, mostly by optometrists who are not permitted by law to use drops, who tell of the danger of glaucoma and other dire consequences from the use of drops. It is true that the intraocular tension does rise sometimes from the us of mydriatics in persons who are predisposed to glaucoma. This happens only in the rarest instances with a careful oculist, who always follows the ue of any mydriatic in the adult with a few drops of pilocarpine, which controls the tendency for the tension to rise.

Doctor! Can you give me some drops to strengthen my eyes? If the eyes are normal they do not need strengthening; and if not, then they need a careful examination to see what is the matter and correct the defect, if it is correctable. Also, a frequent request is for drops to prevent infection during an epidemic of "Pink Eye". There is no tonic drop or drops which one can use as antiseptic for prevention which will not do more harm than good. The tears contain a natural enzyme which is strongly antibactericidal. In fact, much more so than any drops which we can prescribe. Anything that will lessen or dilute this flow of tears lessens the resistance to the inroads of pathogenic organisms. It is different when one already has an infection, for then the normal composition as well as the volume of flow of normal tears is interfered with and we must use a substitute.

Will eating carrots or taking vitamines make me see better in the dark? Or improve my sight? Or cure colorblindness? Only in those cases where there has been a definite deficiency in the diet of vitamines will there be any benefit; and these cases are quite rare. Red green blindness is a congenital condition which cannot be helped by treatment or diet, since it is due to a failure to develop some of the elements in the retina. There are cases of temporary central colour blindness due to toxic substances, such as tobacco; but that is anther matter.

Will my bad eyes be apt to be inherited by my children? This is another one that we have to answer not infrequently. That all depends. Some eyes which are diseased, say from syphilis, can be made safe before the baby about to come arrives, by proper, pre-natal treatment. On the other hand, such things as Leber's disease, or inherited optic nerve atrophy, cannot be prevented. Patients with hereditary cataract, hereditary glaucoma, extremely high degrees of nearsightedness should either have no children or be advised against marriage.

I do not wish this to be interpreted so that a person who has had cataract or glaucoma in his family should not marry: but I refer to the hereditary type. We do know

that cataract and glaucoma patients' children inherit a predisposition to develop these conditions; but that is something entirely different from the hereditary forms.

While on the subject of nearsightedness, may I say that if several of the family are nearsighted, the strong probability is that some the children will inherit this tendency. For, since tall parents are apt to beget tall children and the reverse, so an elongated eye tendency is also likely to be inherited. You probably know that nearsightedenss itself is not inherited, but the tendency to become that way is; for all normal babies are born with flat eyes, or farsighted eyes, which lengthen as they develop. Sometimes they forget to stop elongating and then we have a nearsighted eye.

I know that you are often asked when the parent should take the child to the eye doctor for a check-up, or for first examination. I wish that more people would ask this question, for then a lot of trouble would be saved for many people. Providing that there has been nothing unusual noticed about the child's eyes, I would say at about the age of three or four years. The mere fact that a child is hyperopic or astigmatic to a slight degree does not necessarily mean that he must wear glasses. If he has no symptoms of strain or headaches, let him alone, for some are able to overcome a relatively high degree of error without doing any damage or causing any distress; whereas others ars compelled to have the slightest error corrected in order to be relieved of symptoms. This is sometimes due to a temporarily lowered resistance, but may often be psychic. Or, occasionally, a child admires another who wears glasses and wishes to imitate him. This may account for many of the cases "cured" by the Bates system, Christian Science and other fads. Should there be some hereditary eye trouble in the family, then the child should be brought to the oculist at a much earlier age. Before entering school he should be examined again; and then at regular intervals during the entire school age for further check-up once or twice a year. The tendency for myopia to develop and increase is greatest during the period of greatest growth; that is, between the ages of 6 and 18. After that, the increase is generally negligible.

Most people resent the fact that they are compelled to wear glasses for close work in the early forties, just as they resent approaching old age generally; but it is a foolish and prevailing idea that because one starts to wear glasses for reading, the mere fact that he started wearing them means that he will always have to wear them. Of course, he will, but he would feel the increasing need for them regardless of the fact that he once started to wear them, for the eye ages just like the rest of the body does. That question probably comes up oftener than any other one about the eyes. *Doctor! If I once start wearing glasses for reading does it mean that I never will get rid of them?* Of course, he will never get rid of them; but without them, on the other hand, he would never be able to read fine print with comfort, if at all, providing he has had normal eyes in the first place.

So when you see a patient stretch out his arm to see newsprint, or, perhaps do it yourself, tell him that he may as well become resigned and get himself fitted with proper glasses, for, willing or not, it means that he is getting older. On the other hand, when one has already been compelled to wear glasses for close work and comes to you saying, "My eyes are getting stronger, for I no longer need them for reading and see better without them," it is not a good sign, but generally means that he has commencing cataract.

Doctor! What colour will my baby's eyes be? We know that all babies are born with blue eyes, because the pigment in the stroma of the iris does not develop until shortly after birth, whereas the pigment on the posterior surface of the iris is fully developed when the child is born. Even most colored babies have blue eyes at birth, but the pigment stroma develops rapidly in them; whereas in the white race it takes from a few hours to several weeks before the colour of the eyes becomes permanent. Should there be no pigment at all in the iris, then we have an albinotic eye, which is pathological and is usually associated with a high refractive error and nystagmus, resulting in poor

vision. Thus you see that a blue eye may sometimes turn brown; but, on the other hand ,an eye never turns from any other color to blue.

Do babies see when they are first born? And during the first few weeks of infancy? They do see, but they do not observe and they do not focus the eyes together. For this reason, an infant is often thought to be crosseyed for the reason that one eye will sometimes wander off. Unless this is continuous, it need have little significance. It is well to keep these cases under observation until such a time when we can definitely determine whether the case is a pathological one or not. We do, occasionally, have a sixth nerve paralysis, due to injury, probably hemorrhage in the nucleus, or near it. These often disappear after a few months, or even after a period of as long as a year or more. After the child is two years old the power of the muscles can generally be measured and the condition definitely determined. Conjugate vertical movements are developed earlier.

News and Notes

Dr. George Athans, formerly of the Vancouver General Hospital, is now practising in Kelowna, B. C.

Dr. R. M. Lane, of Tranquille, is now doing post-graduate work at the Kingston General Hospital.

Drs. Walcolm Allan and *S. H. Fishout* have taken time out in the East to further their studies in tuberculosis control.

Dr. Bruce Bryson, of Essondale, spent three months recently in the Lengley Porter Clinic in San Francisco on a government bursary in public medicine.

Dr. N. D. Knott is on a post-graduate course in the U.S.A. preparatory to enlisting with the Navy Airforce.

A new medical clinic building is now being erected in Nelson. *Dr. N. E. Morrison* has been on an extended holiday in England with his family.

New doctors at the Williams Clinic in Trail are *G. I. Piercey, H. B. Dimock, J. Stefanelli* and his wife, the former Elaine MacLean. A new clinic building has recently been opened. *Drs. C. G. Morrison* and *W. J. Endicott* are away on post-graduate courses at present.

Dr. W. J. Mahabir is now on a special course on ACTH study at the Vancouver General Hospital.

Dr. F. L. Wilson, of Trail, has been elected head of the West Kootenay Medical Association. President for East Kootenay is *Dr. T. J. Sullivan,* of Cranbrook. At their annual meeting a panel of four addressed the group. These were *Dr. S. A. Wallace,* of Kamloops, and *Drs. F. S. Hobbs, A. W. Bagnall* and *Lynn Gunn,* of Vancouver.

Dr. T. H. Patterson, of Prince George, has been awarded a year's study in medicine at the University of Michigan by the Dominion government.

Dr. R. B. Burroughs has left Vancouver to undergo post-graduate training in eye in the East. His practice has been taken over by *Dr. Bruce Cates.*

Dr. J. E. Edmison has been appointed to the Radiology Staff of the Veterans' Hospital in Victoria.

Dr. Fred Elliott, formerly of Port Renfrew, is now in practice in Victoria with *Dr. G. F. Homer.*

Dr. T. F. Rose has established a practice in Victoria.

The Annual Dinner of the Victoria Medical Society in conjunction with the Bar Association was held on December 8th. Dr. Myron M. Weaver was the guest speaker. Dr. Henry Scott, of Vancouver, was also present.

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BIRTHS

To *Dr. and Mrs. F. W. Hurlburt,* of Vancouver, a son.

To *Dr. and Mrs. Grant Gould,* of Vancouver, a son.

To *Dr. and Mrs.1 H. Cantor,* a son.

To *Dr. and Mrs. John dePew,* of Campbell River, a son.

To *Dr. and Mrs. G. A. Nicholson,* of Essondale, a daughter.

To *Dr. and Mrs. C. E. Battle,* of Vancouver, a son.

To Dr. and Mrs. Sidney Kaplan, of Vancouver, a son.

To *Dr. and Mrs. George Walsh,* of Vancouver, a son.

To *Dr. and Mrs. W. G. Evans,* of Vancouver, a daughter.

To *Dr. and Mrs. W. H. White,* of Vancouver, a daughter.

MARRIAGES

Dr. L. H. Crimp, of Victoria, to *Margery Hatchell,* Vancouver.

Dr. Ying Chou, of Vancouver, to *Wynnie Wong,* of Toronto.

Dr. James Frazee, of Vancouver, to *Mary Nightingale,* of Montreal.

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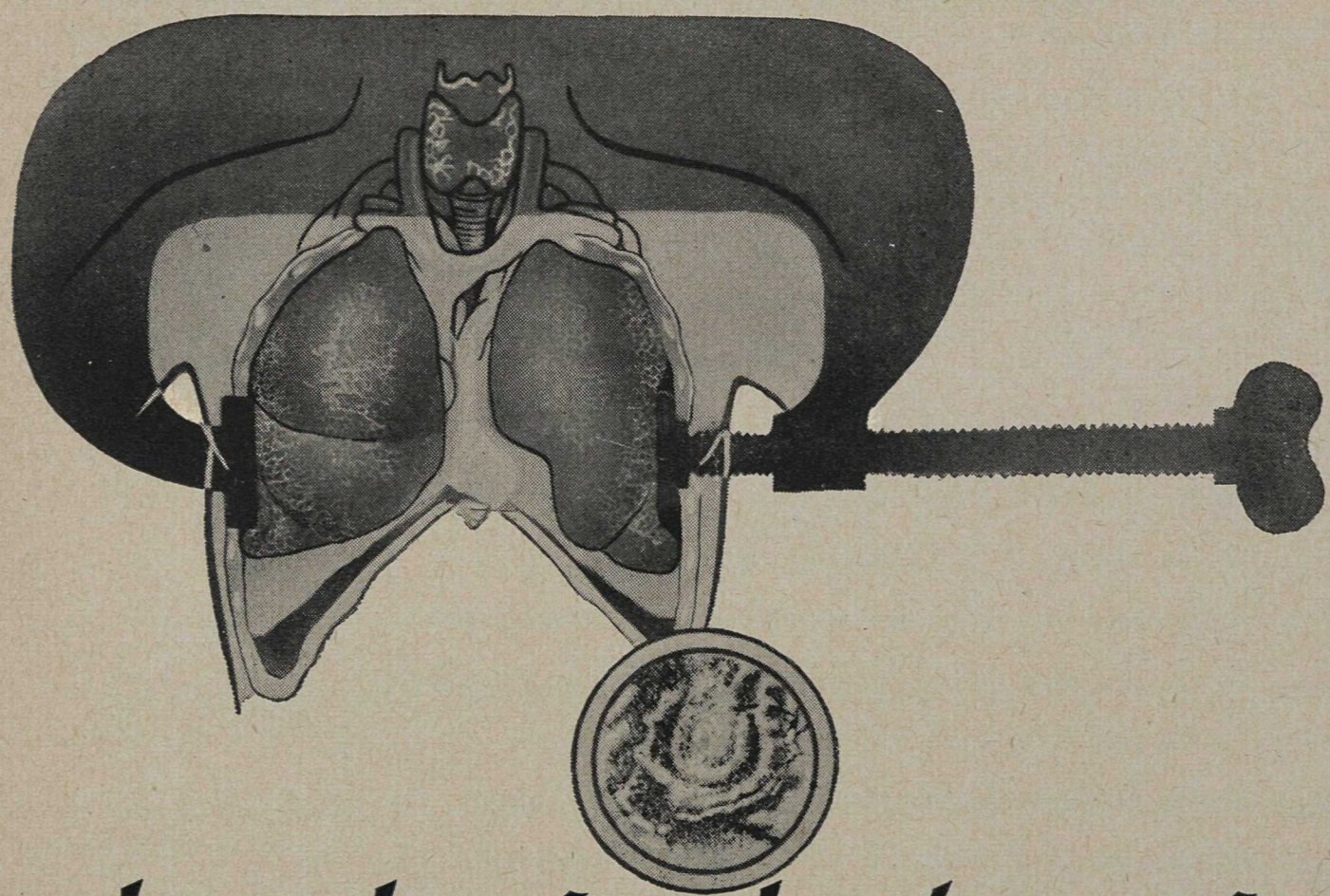

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