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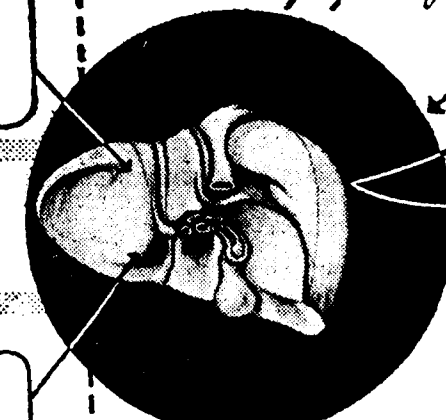
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Saddle Block Anesthesia in Obstetrics

(REPORT OF 106 CASES)

By

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INTRODUCTION

The saddle block anesthesia in obstetrics is getting more and more popular and has several advantages. There is increased safety for mother and the fetus. The relief of pain is immediate and of a very high degree and the method of administration is also extremely simple.

It was attempted in 106 obstetrical cases for relief of pain and the side effects of this procedure were compared with those obtained in a series of 100 control cases.

SELECTION OF CASES

A rigid routine of alternating trial and control cases was not possible. Obstetrically difficult cases were preferred for the anesthesia. The number of primi-

paras in the trial group is, thus, significantly more.

The anesthetic was usually administered after four fingers dilatation of the cervix for relief of pain during second stage of labour. During the first stage of labour the patients were usually managed with chloral hydrate, potassium bromide and pethidine.

The absence of contraindications was meticulously observed in every case. The main contraindications considered were disease of the central nervous system, local infection at the site of lumbar puncture, patients in shock and coma, severe hypotension, cardiac failure, and constriction ring dystocia. Neurotic type of patients and those suffering from chronic backache, headache and migraine were not taken up for trial.

TECHNIQUE OF SADDLE BLOCK ANESTHESIA

1. Injection of Atropine 1/100 gr. was given hypodermically about one hour before the anesthesia. Ephedrine 0.04 grammes was given intramuscularly just before the lumbar puncture. This regime was carried out to guard against the fall in the blood pressure.

2. Heavy Nupercaine of Ciba was used for the saddle block anesthesia. This substance has a specific gravity of 1.024, which is heavier than that of C.S.F. Lumbar puncture was done between the Lumbar 3rd and the 4th vertebrae with the patient in the sitting posture. Cisternal puncture needle was used, which is equal to 24 gauge needle of B.D. type only 0.5 c.c. of heavy Nupercaine was injected slowly into the subarachnoid space, without previously removing the cerebrospinal fluid and without previous admixture with it. The patient was maintained in the sitting position for 3 to 5 minutes. The movement of the heavy solution within the subarachnoid space gets governed by gravity and the inclination of the spinal column. As the patient is in sitting position the heavy solution sinks to the lowest part of the thecal sac and it affects only the sacral roots. The soles of the feet and the legs are not anesthetised.

3. The administration of oxygen was carried out in all cases.

ANALYSIS OF RESULTS

The effectiveness of the anesthesia was evaluated solely on the basis of subjective relief of pain obtained by the mother.

SUBJECTIVE RELIEF

Out of 106 cases 99 cases had complete subjective relief of pain. Five cases had incomplete relief and 2 cases had no relief.

TABLE I

Relief of pain in 106 Cases of Saddle Block Anesthesia	
Complete relief.....	99 cases
Partial relief.....	5 cases
No relief.....	2 cases

Patients were classified as incompletely anesthetised when they continued to feel pain of the uterine contractions to some extent. The two cases who did not obtain any relief of pain were not successfully anesthetised. Nupercaine could not be injected in the spinal canal at all these cases as only blood stained fluid came out after repeated lumbar puncture.

The duration of the subjective relief of pain varied from two to three hours. 94 of the anesthetised cases delivered within two hours. The remaining 12 cases of the series delivered within 3 hours. In several cases even the episiotomies and the perineal tears could be sutured, without any further anesthesia.

PARITY

Out of 106 cases 28 were primipara, 12 were second para, 13 were third para, 12 were fourth para, 9 were fifth para, 11 were sixth para, 6 were seventh para, 5 were eighth para, 4 were ninth para, 3 were tenth para, 1 was eleventh para and 2 were twelfth para.

TABLE II
PARITY

Para	Trial (Cases 106)	Control Cases (100)
I	28	5
II	12	4
III	13	18
IV	12	20
V	9	3
VI	11	22
VII	6	16
VIII	5	6
IX	4	3
X	3	3
XI	1	-
XII	2	-

About 40% of the cases taken up for trial were either first para or second para because the labour was expected to be prolonged and distressing in this group.

TYPES OF DELIVERY

78 were spontaneous deliveries, 18 were delivered after forceps application in which 12 were right occipito posterior 8 cases were of breech presentation, which were assisted or extracted, and in two cases internal version was done to deliver the child. The spontaneous deliveries may have been possible in some more cases, by waiting for longer time and educating the patient to bear down at the time of uterine contractions. In some cases prophylactic outlet forceps was done. Twelve cases were of right occipito-posterior and with low forceps easy delivery could take place. In the control series 14 were forceps deliveries, and four delivered by breech.

TABLE III
TYPES OF DELIVERY

Types of Delivery	Trial cases (106)	Control Cases (100)
Spontaneous deliveries	78	82
Forceps	18	14
Breech	8	4
Internal Version	2	Nil

82% of the cases in the control group had spontaneous deliveries as opposed to 73.5% in the trial group. 26% of the cases in the trial group presented some sort of obstetrical difficulties and definitely required anesthesia. In none of these cases the saddle block anesthesia was supplemented with any other form of anesthesia.

TABLE IV
SIDE EFFECTS

Side Effects	Trial Cases (106)	Control Cases (100)
Temperature	16	14
Headache	16	8
Neuritis	5	12
Catheterisation	9	-
B.P. Fall	9	-
Sciatica	1	-

The saddle block anesthesia is not without disadvantages. The number of patients who complained of headache in the trial group was double than that in the control group. This headache is supposed to be a post spinal headache. It is caused by the hypodynamics of the cerebro spinal fluid circulation, or it may be due to the pulling of blood in the splanchnic vessels and in the lower extremities. The sudden release of intra abdominal pressure occurring after deli-

very further augments the vaso-motor paralysis due to the action of spinal anesthesia on the splanchnic nerves. (Leighton) ³ (Mehl). ⁴

TABLE V
HEADACHE AFTER ANESTHESIA

Duration of Headache	Trial Cases (106)	Control Cases (100)
No Headache	90	92
For 1 day	7	6
For 2 days	4	—
For 5 days	3	—
For 10 days	—	2

Usually the patient complained of dull ache in the back of the neck extending to the occipital region and occasionally to the frontal region. Prostigmine, benadryl, ephedrine, nicotinic acid were tried but without much help. Tight abdominal binder gave relief in some cases.

There was no suggestive evidence that the third stage of labour was unduly prolonged after this anesthesia.

TABLE VI
DURATION OF 3rd STAGE

Time	Trial Cases (106)	Control Cases (100)
Within 10 minutes	82	95
Within 20 minutes	23	4
Within 35 minutes	4	1

It appears from the above table that there were more cases in the anesthetised group where the third stage of the labour was delayed for more than 10 minutes. But it should be remembered that many of the cases taken up for anesthesia presented some obstetrical problem and their third stage of labour was likely to be prolonged, in any case.

Incidence of catheterisation was slightly higher in the anesthetised group. Catheterisation within 24 hours after delivery was not considered abnormal. 8 patients had to be catheterised for two days, and only one patient was catheterised for 6 days. Early ambulation diminished the frequency of catheterisation. 24 hours after delivery the patients were allowed to go to the bathroom. Urinary tract infection was not noticed in any of the cases.

The incidence of fever was nearly the same in both the groups. Fall of blood pressure upto about 20 mms. of mercury was noticed in few cases. Majority of these cases were of eclampsia and pre-eclampsia.

Danger of neurological complications is supposed to be always associated with this form of anesthesia, but no permanent neurological damage was observed in this series. Tingling and numbness in the lower extremities, and pain in the distribution of sciatic nerve were reported, but all these patients were relieved of their symptoms during their usual stay of ten days in the hospital.

The incidence of the abnormal child birth is classified in the following table:—

TABLE VII
ABNORMAL CHILD BIRTH

Condition of the New Born	Trial Cases (106)	Control Cases (100)
Twins	2	—
Still births	7	4
Premature	10	5
Neonatal deaths	5	—
Congenital anomalies	3	—

From the above table it might appear that incidence of abnormal child birth is more in the trial group. Criteria for selection of cases in both the groups were different, and more abnormal cases were taken up for anesthesia. Hence, the fetal abnormalities and the fetal mortalities in the cases of the trial series should not be attributed to the anesthesia. Usually the babies born after the anesthesia were of good colour and muscular tone, and their cry and breathing were spontaneous.

COMMENTS

There is no doubt that the saddle block anesthesia has definite place in the obstetrical practise. It is better suited for cardiac patients and those patients suffering from respiratory diseases. There were no respiratory complications following the anesthesia in the present series. Shock or a marked fall in blood pressure were also not noted in the series.

The relaxation of the genital passages was complete. The presenting part was brought to the outlet in many cases by the action of the uterine contractions alone. The mechanical trauma to the fetal head was minimised by the elimination of the involuntary bearing down reflex. There were no ill effects on the new born. The after care of the anesthetised patients was easier. Convalescence was remarkably smooth. The patient was returned to her room soon after delivery without any signs of fatigue and was able to take nourishment when desired.

The time of administration of the anesthesia requires definite mention. It

should not be given till the end of the first stage of labour. Its administration should be reserved for the relief of pain in the second stage of labour. Earlier administration of the anesthesia may impede the progress of labour. The rotation of the head will occur usually before the late first stage. If anesthesia is administered after this rotation, the delivery is more likely to be spontaneous. Too early administration of the anesthesia may necessitate a repetition of it in the later part of the labour.

The incidence of the post spinal headache was 14%. But in none of the cases of this series it was very severe and long lasting, no neurological complications of significance could be noted in the present series.

Huston and Lebherg, Green, and his associates have shown that smaller the gauge of the spinal needle, the lower the incidence of post spinal headache. They could reduce it to 2.8% in their series. In this series 24 gauge cisternal puncture needle was used. The incidence would have been lessened if smaller gauge needle was used.

SUMMARY

I. Saddle block anesthesia with heavy Nupercaine solution was attempted in 106 obstetrical cases. It provided complete subjective relief in 99 cases.

II. The side effects of the anesthesia were compared with a group of 100 control cases where no anesthesia was used. The incidence of the post spinal headache was 14% in the anesthetised patients.

III. No major complications due to anesthesia were noted in the series.

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Radiological Diagnosis of Bronchogenic Carcinoma

By

Dr. K. M. PILLAI. B. A , M. B. B. S., D. M. R. D. (London)

RADIOLOGICAL DIAGNOSIS OF BRONCHOGENIC CARCINOMA

In our Province, as in the Western countries, Mass Miniature Radiography has brought to light a large number of Pulmonary neoplasms. Some of these patients at the time of survey were asymptomatic. Whatever the real facts may be that have contributed to the larger numbers of Neoplasms that have been detected in recent times, whether the increase of incidence is apparent or real, considerable credit must be given to very many advances that have been made in Diagnostic Radiology. There is a very heavy responsibility that rests on the shoulders of the General Practitioner to whom the patient always goes with the vague complaints of a Hacking cough or a slow loss of weight and in whom there may not be any obvious clinical signs. It is equally important from the G.P's point of view to understand and interpret a Radiogram where there may be some evidences to suspect a lesion. It is also the responsibility of the General Practitioner to convince the patient of the need of further investigation and if necessary surgery.

A Bronchogenic Neoplasm is known to have been discovered accidentally either during a mass survey or during

the course of an investigation for some intercurrent illness. This group of patients is a serious problem from the Prognosis and treatment points as they are often discovered accidentally and by that time unfortunately too late for any surgical intervention.

The commonest site of Bronchogenic carcinoma is in the right main Bronchus. The Endobronchial growth, small at first, in time acquires sufficient size to fill the lumen of the Bronchus. This filling of the lumen is expiratory at first as the Bronchus contracts during expiration. While the size of the endobronchial growth allows air to enter the alveoli during inspiration due to the active dilatation of the bronchial wall, no air is allowed to escape due to the diminished lumen of the bronchial tree during expiration. This stage of 'Obstructive Emphysema' can always be seen if carefully looked for either by Fluoroscopy or by taking two pictures in Inspiration and Expiration. This is a very early radiological sign that becomes evident some time before the growth actually occludes the lumen. At this stage it is often possible to successfully operate on the patient.

The growth slowly fills the entire lumen of the affected bronchus and completely prevents any exchange of

air. This results in an Atelectasis of the distal segment involved. The detection of a collapsed segment is therefore a late and not an early sign from the point of view of prognosis.

By the time the growth produces total collapse of the involved segment, the draining glands at the hilum are involved and appear enlarged in the X-ray picture. The primary growth itself may or may not be evident. When seen it appears as a rounded shadow of uniform density in the lung field.

Sooner or later the contralateral glands get involved in the process. It is vital to recognise this extension as it is a total contraindication to surgery. Involvement of the Pulmonary arteries in the glandular mass or by a perivascular infiltration may lead to a Haemoptysis and if erosion of the wall occurs to a fatal haemorrhage.

The Growth may break down to become an abscess. This is the stage of a "Cavernous Neoplasm." There are fine distinctions between a Cavernous neoplasm and a Lung abscess: but basically both are abscess cavities and there are a number of similarities between the two. The best way to differentiate is by the demonstration in the wall of irregular nodulations in the breaking down neoplasm. Malignant cell demonstration in the Sputum is the most confirmatory evidence.

The best way to demonstrate the irregular wall of a neoplastic cavity is by Tomography. I shall refer a little later to the special methods of investigations of value in the diagnosis of this condition but let me stress now the very

valuable use of this method in the diagnostic armamentarium of the practising Radiologist in confirming or otherwise of a lesion. This method is very extensively used in a large number of countries especially in the University of Genoa under the very distinguished Radiological chief there--Prof. Vallebona. There is practically no field where this method is not applicable and where the information obtained is not confirmatory.

Phrenic palsy may occur when the growth or the glands involve the Phrenic nerve. This may result in a raised immobile Dome of the diaphragm or may show Paradoxical movements.

Pleural effusion may be seen when a lesion involves the pleural surface. The type of fluid cannot be assessed by radiological examination.

I have stated earlier that Atelectasis is often the first presenting Radiological sign. Atelectasis may occur in conditions other than Bronchogenic neoplasms and therefore the causative factors must be thoroughly gone into to exclude simple causes. Among the special investigations that merit mention in the diagnosis of this condition are Tomography, Bronchography and Bronchoscopy.

I have already mentioned a few words about Tomography. This method in addition to giving details of hidden cavitations will clearly demonstrate tissues hidden behind other structures and more important than these, demonstrate involvement of vessels in the growth and also give accurate information of the depth of the lesion. It is a

simple procedure to Tomograph a patient: can be done in the erect, recumbent or any other desired position: takes only a few minutes and needs no special preparations. The information obtained from this procedure very often precludes any further and more complicated investigations. I would therefore, as a routine measure, suggest Tomogram before any other investigations.

If for any particular reason, this method of Tomography is not done, then *Bronchography* and subsequent Bronchoscopy must be resorted to confirm the diagnosis. I have put Bronchography before Bronchoscopy deliberately and in italics. At the present day, Bronchography carries no risk: the contrast agents like Dinasil are so rapidly eliminated from the system that no trace remains at the end of two or three days: they are well tolerated by patients: the Dye can reach areas where the Bronchoscope can never reach: the Dye can be moved from one place to another to visualise the entire tract if necessary and the procedure can be done and repeated if necessary as Outpatient investigation. Bronchography can also demonstrate other causes of Atelectasis and thus differentiate simple conditions from Malignant lesion. Bronchography would be able to demonstrate the Bronchus distal to the stenosis while by Bronchoscopy can only reveal the proximal portion.

Bronchoscopic investigation confirms the lesion and the nature of it can be ascertained by biopsy. Prior Broncho-

graphy can give very valuable information to the Bronchoscopist regarding the segment and displacement, if any, of the affected Bronchus from its usual position. The middle lobe bronchus can shift medially to the position very nearly occupied by the lateral basic segment bronchus and thus an erroneous impression might be created. This is possible in cases where atelectasis displaces the segments from their normal positions. Although this is a simple point to consider, it is not rare to have a Bronchoscopic report of "no growth seen" in these cases. I have mentioned a few of the important reasons why a particular system should be followed in investigating a suspected case of Bronchogenic Carcinoma with the idea of getting the best results.

There has been an actual increase of Lung Cancer in the past few years and every attempt must be made to find out the causative factor and every measure adopted to cure the patient of this dreaded disease. To this end, all the concentrated efforts of the Physician, the Radiologist, the Pathologist and the Surgeon must be put in and in this, a very important part is played by the Radiodiagnostician. The only chance as far as is now known to effect a cure is by surgery and to perform this successfully, all available information must be given to the surgeon. It is therefore of prime importance to first suspect the existence of and then diagnose Lung cancer before any serious attempt at elimination of this disease can be undertaken.

Distribution—An aid to Diagnosis of Skin Maladies

By

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It is comprehensible that many maladies of skin have a pattern peculiarly their own. Though an attempt is made to indicate particular pattern commonly encountered, none can venture to be dogmatic and emphatic since Disease and Nature do not follow solitary and invariable pattern. Exceptions, atypical types and rarities are always there. This article is by no means complete and comprehensive but can be considered helpful in certain conditions. It is emphasized that distribution of lesions alone is not pathognomonic or diagnostic of skin diseases. It may aid in the diagnosis of common conditions along with other factors.

SCABIES

This disease has a highly characteristic distribution. The usual areas mentioned are, the medial aspects of fore arms, anterior axillary folds, flexures of wrists, interdigital folds, buttocks, inner aspects of thighs, penis in men and areola of the breast in women. In infants, in addition, face, scalp and the soles of feet are usually involved. In adults these areas are free. The most important special type of lesion is the 'burrow'. This is a linear elevation in the skin caused by the burrowing *Acarus*. In the animal type of Scabies the 'burrow' is characteristically absent. When there is

severe secondary infection or sensitization this pattern may be masked.

PSORIASIS

Pillsbury states that the tendency to involve the scalp, knees, elbows and the back is characteristic of at least 75% of all cases of Psoriasis. Again it is mentioned that various types of Psoriasis may produce varied patterns of lesions. Nail involvement is not always present. Pitting of the nail plates or yellow discolorization with thickening is the common change. In the scalp the tendency is to involve the periphery, mostly around the hair margin.

ACNE VULGARIS

Acne is a chronic inflammatory disease of the pilosebaceous follicle. It is natural to expect lesions where the follicles are more abundant, large and active. The face is the most frequently involved site. But in many a case shoulders, chest, upper back, neck, upper arms are also involved. But the involvement of the scalp is striking. The important special type of lesion in this condition is called a comedo or black-head. This is derived from the fatty plug at the mouth of the sebaceous follicle.

SEBBORRHEIC DERMATITIS

This condition has almost a uniform pattern. In moderately severe conditions

the chief, often the only area involved is the scalp. The other areas involved, in the order of their frequency are, eye brows, eye lids, nasolabial folds, ears (external auditory canals and retro auricular folds), pre sternal and inter scapular regions and public regions. In some patients intertriginous areas, like axillary folds anogenital region, under the breasts (in women) may become involved. Interestingly the intertriginous areas of toes are not involved possibly due to the absence of sebaceous glands.

ROSACEA

The lesions of this disease occur in a highly characteristic pattern. This is disease of the middle aged, involving the 'flush' areas of the face. Telangiectasia, acne form lesions, (acne rosacea) and hypertrophy of the skin of the nose (Rhinophyma) are the types noted. Seborrhea may be associated with this condition.

PITYRIASIS ROSEA

This condition offers no difficulty in diagnosis as the pattern is easily recognizable. It is a mild inflammatory disease characterized by salmon coloured macular and papular lesions involving the trunk. The patches are oval or circinate and are distributed in a more or less segmental arrangement. The fully developed eruption is striking, since the long axis of the patches are parallel with the lines of cleavage. The lesions are preceded by appearance of a solitary patch—the so called herald patch. Though the area chiefly affected is the trunk and upper parts of arms and legs, face and arms may occasionally be affected.

ERYTHEMA MULTIFORME

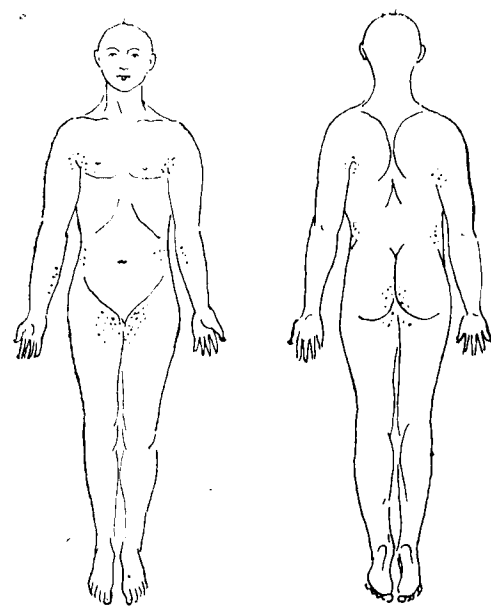
Broadly speaking, Erythema Multiforme is a reaction pattern than a disease. The distribution pattern is fairly typical. The areas are the face, lower portions of extremities and the genitalia. There may be extreme involvement of the mucus membrane including the conjunctiva (Stevens, Johnson-Disease). Sometimes a vesiculo-bullous type is met with. The sites of predilection for this variety are the palms and soles.

ERYTHEMA NODOSUM

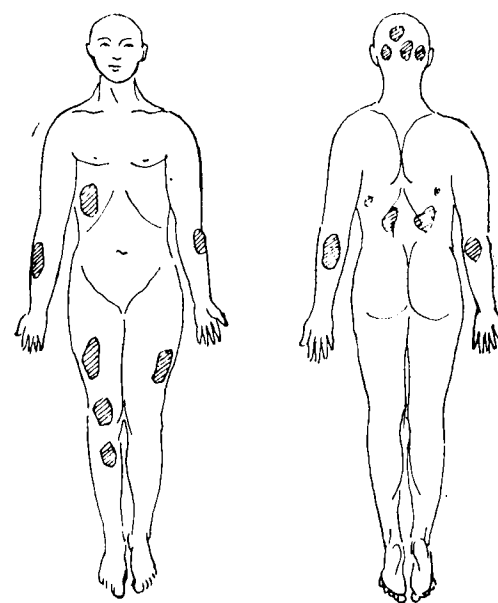
This an acute or subacute perivascular subcutaneous reaction where the lesions—bilateral, nodular and tender—are seen in the extremities, very commonly over the skins. The onset is ushered in by constitutional symptoms like malaise, fever, pain in the muscles and joints. This condition is often associated with Rheumatic fever, septic sore throat, Tuberculosis, Leprosy and the ingestion of drugs like iodides, bromides sulphonamides etc.

LUPUS ERYTHEMATOSUS

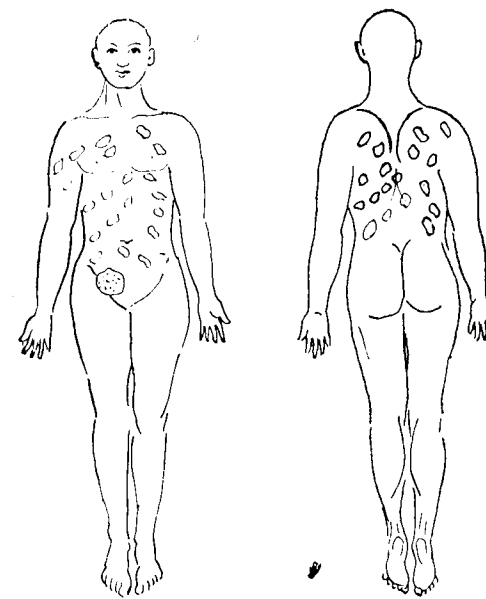
Chronic discoid Lupus Erythematosus has an extreme predilection for exposed areas like face, head, neck and hands. There is evidence of photosensitivity. The favourite locations are the bridge of the nose and the flush areas of the cheeks, where the shape of the lesions may suggest a butterfly. This is a benign condition with a prolonged course often producing atrophy and scarring and cosmetic disfigurement. Polymorphous light eruptions and Pellagra may sometimes have to be excluded.



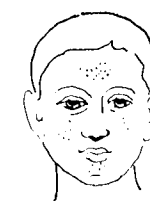
Scabies : (Distribution)



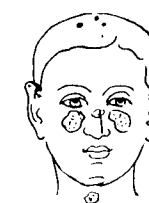
Common Sites for
Psoriasis



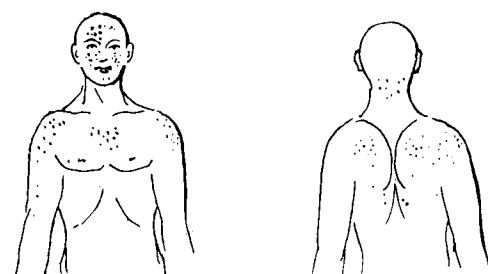
Pity. Rosea
The common type of distribution



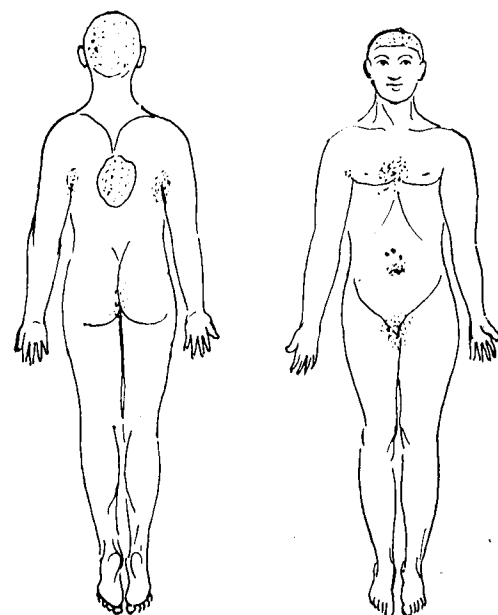
Typical Rosacea pattern



Discoid Lupus
Erythematosus



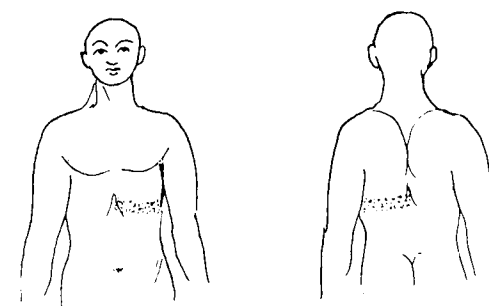
Common Type of Acne



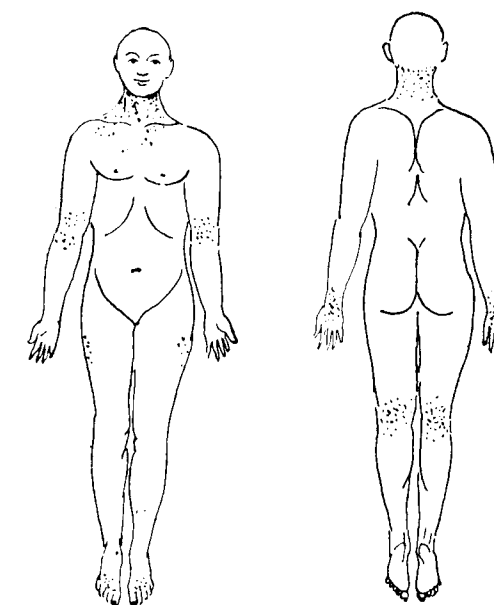
Extensive
Seb. Dermatitis



Erythema Nodosum



Herpes Zoster
(An Illustration)



Characteristic sites for
Atopic Dermatitis

LICHEN PLANUS

This is chronic inflammatory disease of the skin and mucus membrane, which has a predilection for the flexor surfaces and the trunk. The common areas involved are the buccal surfaces of the cheek, the flexor surfaces of the wrists, the trunk and the genitalia. In the hypertrophic type there is a tendency to involve the lower extremities.

ATOPIC DERMATITIS

In the post infantile phase of this disease the distribution pattern is remarkably characteristic. The flexures of knees and elbows, face neck and distal parts of the limbs. This type of disseminated lesions repeatedly occur in the same site.

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POINTS BY NATIONAL PROGRAMMES

Issued by W. H. O. South East Asia

A "considerable decrease" in the number of deaths among premature babies is reported as the result of the setting up of a Premature Unit connected with the Paediatric Department of Nagpur Medical College.

Doctors from the Paediatric Department now carry out BCG vaccination, which is offered to every new-born child in the Hospital. Today 92.9 per cent of the new-born receive BCG vaccination. A new maternal and child health centre has been established for teaching purposes and small-pox vaccination introduced as a routine.

HERPES ZOSTER

Every one is familiar with this virus disease characterized by groups of vesicles situated along the distribution of nerves from one or more posterior ganglia. The eruptions are usually unilateral which is of diagnostic importance. There may be a few lesions on the opposite side of the midline, in most cases, due to the transverse nerve twigs. Zoster may involve two widely separated areas at the same time possibly unilaterally.

SUMMARY

Distribution of dermatologic lesions as an aid to diagnosis has been outlined. Though this does not cover all the types, common conditions with their common pattern are described.

A WHO report on the pediatric programme in Visakhapatnam states: "The Pediatric Department, which before the beginning of the project was one of the smallest and least developed in India, is now near the top." The head of the Department has been appointed full professor, thus becoming the second professor of pediatrics in the whole of India.

In Bombay State a total of 78 primary health centres and 50 maternal and child health centres has been established by the end of 1957.

CAREERS IN MEDICINE

Some Inquiry into "Why We Study Medicine" and "Why We Specialize"

By

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TYPES OF DOCTORS

The medical profession, in respect of the spirit in which they pursue their occupation, may be divided into four classes, corresponding to four classes of clerical teachers: 1st, Those who have been put into the profession, or chosen it at random, because they must be doing something—loungers who feel their business a toil and a constraint, who at best only desire to escape disgrace and make a living—correlative to the gentlemen in orders, and the drudging curates—a very unprofitable race when gentleman, a very unhappy and mischievous one when otherwise. 2nd, Those who pursue their trade eagerly and diligently for money or advancement—correspondent to the preferment hunters of the Church, and the popular preachers and Tartuffes of all denominations, who will generally be respectable or otherwise, as their rank or connections give them more or less of character to lose. 3rd, The votaries of science, to whom knowledge is an ultimate object, and practice chiefly valued as the means of increasing and certifying knowledge—correspondent to the speculative theologians—the students of religious learning—a class highly estimable and necessary, who answer their vocation well, and dignify their rank, whatever it may be; and 4th, The philanthropists, to whom knowledge is only a secondary object,

valued as the means of abating pain and preserving life—correlative to those Christian teachers and pastors who are animated with the true and faithful love of souls. Among these, it is delightful to find men of all ranks—but rank with them is nothing: these are illuminated with a light, in which there may be many colours, but there is no darknessHartley Coleridge, Life of Dr. John Fothergill.

THREE VIEWS OF THE PHYSICIAN

I remember that as a growing boy a special reward for some rare and now forgotten deed of virtue was to be allowed to look at my father's folios of anthropological lore. A favorite book contained figures from the wall of the cave of the Three Brothers in the Pyrenean hills of the province of Ariège, deep in the south of France. Not only were the animal pictures delightful but the Cro-Magnon artist of some twenty thousand years ago had represented early man with fine perception. One very striking picture was that of a man clothed in a deer skin and wearing as head dress the deer's antlers. In his crouching position, his head was cocked to peer straight at those before him with penetrating almost hypnotic stare. The same awe which his fellow tribesmen felt was certainly part of my reaction. Only later did I realize that here, in fact, was the first portrait of a physician. His

representation in the guise of a primitive witch-doctor emphasizes for grotesque paraphernalia needed to fix the attention of the sufferer and divert him from his pain. Also the atmosphere of fear and horror helped to make strong the faith in his power to heal.

Early peoples attributed disease to supernal and external forces. It was the doctor's job to find what spirit was causing the trouble and then overpower or out-wit him by appropriate ceremony and remedy. Intuitively the magico-religious healer, the priest physician, perceived some of the relations of emotions, social pressures, supports and customs upon health and sickness. Rarely an herb, weed or other medicine might have some actual pharmacological property, but this could not be understood. The major therapeutic virtue was the psychological value of ritual and magic. This won the patient's confidence by showing him that the cause of the trouble had been over-powered and removed. Failure was attributed to the overwhelming strength of the supernatural. Success was always credited to the doctor who therefore exerted tremendous *power* and authority in a community—to be used for beneficent ends by the good, sinister ends by the unscrupulous. For whatever end the mainspring in motivating the earliest physician was the desire for strength or power, to dominate, to be king, though there must have been an admixture of tenderness and human care. Desire for strength and power made tolerable the long and painful apprenticeship to the exalted position of priest-physician.

Much later Imhotep, whom Gesler called the "first figure of a physician to stand out clearly from the mists of antiquity," my second physician, exerted much the same influence through the same employment of amulet and ritual, incantation and incense. But by this time empirical wisdom, the trial and error of a thousand crude tests, was getting fixed in the written record. Physicians were now employing emetics, purgatives, diuretics, enemas, sweating agents and even bleeding. Sometimes harmed, sometimes helped, often comforted, rarely cured, man survived more from innate toughness than because of specific therapy, justly applied. But the physicians of the time of Imhotep were reacting to the urges of curiosity and *wonder*. While they did not dream of the experiment in our sense they wondered and puzzled, observed and recorded. They took advantage of nature's experiments. Thus, wonder or curiosity as a major stimulus is the second historical reason why we become doctors.

A third physician is exemplified by the rude practitioner, called in by the peasants of Perche, in France. As Fraser tells us in the "Golden Bough," it is common knowledge in those parts that a prolonged fit of vomiting is caused by the stomach's becoming unhooked, as they call it, and so falling down. Naturally the physician's role is to hook the stomach up again. Accordingly, after a brief inquiry tells him what is wrong, the physician at once throws himself into the most horrible contortions, crying and writhing in order to unhook his own stomach. Once he gets it unhooked, he

undergoes another and opposite series of twists, turns and grimaces. This of course hooks it up again. With the migrant tripe once more nestled snugly against the midriff, the patient experiences corresponding relief. This extravagant behaviour is the archetype of the bedside manner. It has behind it, not the fee (a mere few francs) but the altruistic motive of the physician to bring help to the sufferer. *Altruism* is the third major force leading us to become doctors.

Cotton Mather records such a phenomena in the too solicitous "Husbands who breed for their Wives; and while they for diverse Months have the Satisfactions that they suffer not one Moments Disorder. Yea, we have known several Husbands carry the Good Humour so far, as to Travail for their Wives... and have the Gossips attending on them while their Wives have brought forth the Offspring with scarce a Groan upon it."

While this look backward oversimplifies the problem it is my purpose to examine to what degree altruism, a sense of wonder, and the drive for power have influenced men in the selection of the profession of medicine as a career. These three forces are major impulses leading us into medicine. If you allow me some latitude I think we may include the significant ones under these three.

My comments will occupy the terra incognita between the mystical probings of the psycho-analytically inclined psychiatrists dredging into the past for motives they claim drive add hurry us along, and the sometimes discouragingly dry data of the less imaginative scientist

who collects sex habits and wasp wings with detached indifference. It depresses me that to him one is as interesting as the other. If my remarks have little of the penumbra of the statistical mists of Kinsey I hope they will also escape the sex-cathedra pontifications of the Freudians. Nor will I stress the guilty and well kept secret of modern psychiatry and psychology that we know more about why and how rats get food in mazes than why people go into a profession or calling such as medicine. But this is no time to belabor psychiatry. In it lies some hope for the future; for its wisest practitioners know well and are deeply frustrated by their inability to apply strictly the scientific rules of biology to its peculiar problems.

Each generation of aspiring undergraduate medical students is motivated by their mental images of the previous generation of physicians; each group of doctors aims to treat their mental images of diseases they studied in school, regardless of how the patterns of disease may shift. Motives for studying medicine may play one false if there are sudden or sharp changes in medical mores. As an example of a shift in the public's ideas about physicians, Dr. Watson in "Sherlock Holmes" was respected. He was rich in deportment if not in wisdom. In today's detective story any physician is a prime suspect as villain or accomplice in I know not what nefarious crimes. This is accepted without question or murmur.

I am getting old enough to look with alarm at the younger generation but I

suspect most of the traditional fretfulness of elders with youth is born not of wisdom but of forgetfulness. I do not subscribe to the notion that today's youth is prematurely old, a generation brainwashed by fear to the extent that it no longer rebels. Certainly it is not the exclusive prerogative of youth to react to the H bomb with feelings of futility. Perhaps, though, it is reason enough why hard work is avoided, with great skill (and effort), why present mediocrity with a modicum of security is accepted against the uncertain future of higher accomplishment. As motives degenerate achievement becomes less impelling than security. Still, those with the most original and independent minds will regard security as a poor substitute for freedom. To people in this class which you belong to, I am addressing my remarks.

What are reasons, we shall want to know, why anyone wishes to enter a career to which the approaches are difficult, the apprenticeship full of trouble, the work long and hard, the goals so distant? And at a time when science's capacity for actual accomplishment is at the upper end of the see-saw while respect for medicine is at the bottom? In an idle moment I listed some seventy-five substitutes for the physician which today's folk lore may urge upon those who are sick or who think they are. This includes quacks and cultists of every kind, patent medicines and machines and the purveyors thereof; the spa, bath or gymnasium; books, journals, newspapers; exercisers; food fads; sunshine; travel; moves to new places;

vibrators and massagers; adjusters and maladjustors promising cures of all sorts; and the do-it yourself skullduggers recommending self-diagnosis and self-treatment but rarely disclosing the sequel, self-sacrifice.

THE MOTIVES

No problem in the whole realm of psychology resists exact formulation more rigorously than that of man's motives. We may forecast, contemplate and review but at best this gives us a sparse yield of firm facts. In short we can never know all the changing patterns of forces which shape and design our careers. All will agree that chance and luck, free will and plan, and hard necessity are determinants of varying intensity in any decision.

Of those who enter the profession of medicine by chance there is little to say. My surmise is that for every one thus deflected into medicine many are turned away. No one will deny that chance played a part in leading each of us into medicine. But chance is a factor outside the range of the analysis of motivation.

The role of emulation is hard to evaluate, but as a general force it is important whether we wish to model our career on the charity, curiosity, or cupidity of our hero. What the psychiatrist calls identification, the wish to become and be like our hero, is a subtle but strong influence. A doctor who has come to help us in our time of need plants the seeds of a strong desire to emulate him. Or we may be moved by wonder at how he knew what was

wrong and what to do. Curiosity may be directed at the true inwardness of medicine or at the process by which practitioners acquire their knowledge. And emulation tinged with envy at the mansion or Cadillac may supply the model we aim to copy.

Emulation in a more traditional approach to medicine may operate as a family trait. Sons and grandsons of physicians follow in their path, having a sense that that was their foreordained lot. So strong may be this feeling that persons with no mental or temperamental fitness for medicine follow the line of least reaction to explicit or implicit family pressure. Those who drift into medical school from such a background are lucky to extricate themselves before the evil tangles of frustration overwhelm them. But a parent's desire may have all the force of final law and may carry the day. Then we merely have to examine the reasons why a father wants his son to follow in his footsteps. I submit that the motives are not different from those intrinsic in the putative physician who pursues his course independently. Perhaps superficial reasons of status are stronger here. Whatever the reason, it is true that professional families provide a large element of replacements, even with a good deal of interchange from one profession to another. Fielding Garrison, Freud and Helmholtz are examples of men who went into medicine at their father's insistence or suggestion.

Some physicians enter medicine as an escape from parental pressure toward

some other career. In this case the parental influence backfires. The relative lack of importance of family tradition and parental pressure in our culture may be seen in the scarcity of families with physicians for more than three consecutive generations.

Another motive for becoming a doctor is the lack of motive. Then medicine is a last resort. Marion Sims analysed his reasons for entering medicine as follows: "A graduate of a college had either to become a lawyer, go into the church, or to be doctor. I would not be a lawyer, I could not be a minister, and there was nothing left for me to do but to be a doctor—to study medicine or to disgrace my family". Welch, wanting to break with his family medical tradition and be a Greek scholar, failed to get a coveted appointment. Thwarted in ambition and beaten down by circumstance he entered medicine by the back door. But medicine for him was not the life of a family doctor but as a manipulator of ideas and an innovator in teaching. Franklin Martin wished to escape the farm boy's lot behind the plough for that of the physician of elegance drawn in a carriage. Oliver Wendell Holmes used a medical career to escape the law, while his son reversed the process. Charles Caldwell, that waspish old medical gossip, became a doctor because his family would not let him study law or become a soldier. Victor Heiser had been a jack of many trades before turning to medicine. Thus we have records of many notable physicians who were in a corner and turned to medicine as a way out.

Women in medicine require separate treatment. Of all the many generalizations I make these are most beset with error. A woman should be spokesman here. The early woman in medicine had little of the altruistic motivation which led Florence Nightingale to resuscitate nursing and establish it as an honorable profession. The drive goading the first women physicians into a medical career must have been largely an expression of the feminist movement. They must be equal to men even if they were not. In essence the motive was the same that caused the suffragette to lash out at men in general. It made life pretty exciting for men. Today when it has been found that with each right comes a duty the militant suffragette, rest her colorful soul, is no longer with us. This motive is gone. Even so medicine is one of the few careers in which a woman can attain intellectual parity with men, and at the same time some social and financial independence. I must not be chided if I say that in my experience most women go into medical school to find a husband. Of all the motives which lead people to be physicians perhaps this is the most natural.

There is a whole miscellany of alleged motives which defy exact classification. Roger Lee "always had the idea that he was going to be a doctor." Many seem to recall no time when they were going to do anything else. Somerset Maugham went into medicine for reasons of snobbery. James Fisher's girl would not marry him as a veterinary surgeon so he became a physician. William Carlos Williams and A.J. Cronin wanted

support for a literary career. Starkey Cobb was complemented by a surgeon for manual dexterity. Reading a medical biography influenced Havelock Ellis. John Bunyan, in a pleasant passage from "The Jerusalem Sinner Saved; or, Good News for the Vilest of Men" tells us of desire for applause and fame as motives.

Christ Jesus, as you may perceive, has put himself under the term of a physician, a doctor for curing of diseases; and you know that applause and fame are things that physicians much desire. That is it that helps them to patients, and that also that will help their patients to commit themselves to their skill for cure with the more confidence and repose of spirit. And the best way for a doctor or physician to get themselves a name is, in the first place, to take in hand and cure some such as all others have given up for lost and dead. Physicians get neither name nor fame by pricking of wheals, or picking out thistles, or by laying of plaisters to the scratch of a pin: every old woman can do this. But if they would have a name and fame if they will have it quickly, they must, as I said, do some great and desperate cures. Let them fetch one to life that was dead; let them recover one to his wits that was mad; let them make one that was born blind to see; or or let them give rip wits to a fool; these are notable cures; and he that can do thus; and if he doth thus first, he shall have the name and fame he desires; he may lie abed till noon.

But now let us come to the main motives—love, wonder and power.

Recognizing that multiple causes always operate, and that motivation is not the nice detached datum we should like, I will select a few examples. Physicians egotistical enough to write autobio-

ographies and sensitive enough to introspect their own motives give us a sample with hopeless bias. This is rectified only a little when biographers interpret their motives for us.

I begin with charity, the old Latin *caritas*. My first example is Jean Fernel, scholar, innovator, teacher and busy family physician who made two great advances. First, he freed Renaissance medicine from the chains of astrology which built a false prognosis based on horoscopes. Next he eliminated the mystic operations of magic which shackled medicine with superstition and kept observation and experiment from taking their rightful place in medical thought. What do we know of this strange man—Jean Fernel—who comes stalking into clear light out of the confused and mystic medical notions of his time. To help orient myself rather than you—when Fernel was twelve, Henry VIII became King of England. When he was 25, Magellan's crew completed their voyage around the World. When he was 38, Rabelais' "Gargantua" was published and to keep the balance even for that year, the Jesuit Order was founded. When he was 46, Copernicus published his epochal work on "The Revolution of the Celestial Spheres". When he was 56, Servetus was burned as a heretic in Geneva.

Fernel was trained at the University of Paris where he was exposed to the full flowering of humane letters. Beautifully made and relatively cheap books were swarming from the fertile printing presses. Even after he had his M. A.

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degree at 22, Fernel decided to go back to a detailed study of Latin and Greek so that he could completely master the classics. Besides reading and studying logic, mathematics, grammar and rhetoric, which he did unremittingly for five years, he seems to have had no particular career in mind. Then when he was 27, he was laid low by a quartan fever, left Paris for the countryside, fresh air and a slow convalescence. There the question of a career forced itself upon him. Before him lay the choice of the church, law or medicine. He chose medicine. To Fernel's natural disposition to scholarly inquiry, his severe illness demonstrated the essential beneficence of medicine. For his further training he supported himself by giving public lectures on philosophy and by serving as a tutor for children of several important families. He later became almost equally famous as a practitioner, a teacher and a medical thinker. That he brought marvelous energy to his career is indicated by his 19 hours of activity beginning at four A.M. with study, breakfast at daylight, patients in the morning, teaching in the afternoon, writing in the evening, bed at eleven P.M.—a veritable prodigy of activity even for that very active period. His medical philosophy he summed up in the following words:

"Is there a greater blessing vouchsafed to mankind than medicine is? Life is our dearest possession by which we breathe and enjoy the company of our fellow beings.

Can any calling be worthier than that which preserves and maintains life itself?

Is wealth or fortune in whatever measure in the last analysis more estimable than is good health?

Is any misfortune or disaster more grievous than ill health?

He who succors the sufferer and the sick exerciseth a knowledge which deserves the admiration and affectionate regard of all men."

My other example is Albert Schweitzer, a contemporary whose story perhaps has been overtold. But it bears retelling. As a boy and young man an intense feeling of love for his fellow man was a moving force rather than a misty dream. Having reached a peak of excellence as an organist, with a choice of a great career in this field he decided to become a physician to minister to the miserable people in a most forlorn part of Africa. His story, told with beauty and eloquence, barely does justice to the heart warming nobility, of the man, his character and his deeds. This stands as a monument to man's natural dignity and a reminder to the cynic that love and altruism are not dead.

It is somewhat harder to document curiosity as a force which brings young people to a career in medicine. When the force is very strong it may stop short in the preclinical sciences which claim some who originally aspired to practice medicine. Hans Zinsser, in his charming autobiography, written by himself as the strip-tease artist for a flimsily veiled alter ego, describes at some length his approach to the science of bacteriology through an apprenticeship in medicine. To begin with he wanted to be a writer. He was advised not to try a career in

belles-letters. His teachers then stimulated a natural curiosity and turned him in the direction of medicine. This he used consciously as the only accepted approach to bacteriology. His medical training was a fine background for his epidemiological and clinical studies. His interest in and cultivation of the fine arts makes him one of the exceptional physicians whose urges to write, the *cacoethes scribendi*, found the author equal to the task—one of the rare physicians who may be read by the perceptive without painful trauma.

I have for a long time been interested in Sir William Osler, who as a physician seems clear enough, but who as a person strikes me as an enigma. His biographers and disciples have left many questions not only unanswered but unasked. A curious paradox is that the path leading him from the ministry to medicine had as trail blazers staunch clergymen with an avid interest in natural history. The steps from diatoms to parasites to higher animals to man were followed in a logical sequence along the microscopic pathway. A rich and sustained wonder in the world about was the apparent motive. Osler did not leave us much in the way of personal introspection to examine. His capacity for absolute concentration and his personal amputation of the past and lack of concern for the future might set the psychiatrist dreaming but I find little to fix on as fact. At least one of the strong motives leading him to medicine was curiosity. His ability to keep his own alive and stimulate it in others is one of the measures of his greatness. We are thankful

that it found another focus in digging into the past history of medicine which he illuminated in many elegant essays.

Autobiographical admissions that the desire for power in any form led to medicine are not to be found. Biographers have hinted at it. I shall not trot out any black list of those who admitted going into medicine to obtain money and power. We can all name those we know. They gravitate into areas where they believe they will obtain the largest financial returns. Some are in all fields. Most are specialists, and generally those who exploit some technique. The brevity of this section is no indication that this is not a very, very important force. I simply prefer to call names.

SPECIALIZATION

Having considered why we are led to a career in medicine we may look at the possible motives which direct us into a particular specialty. Whatever the reasons for studying medicine, the first year student enters medical school with only the haziest notions of medical practice, economics and politics. Even if respect and admiration for his family physician got him this far, new and disturbing elements are fermenting. His own family no doubt has called to his attention the dilapidated old car of the practitioner and the fancy model of the surgeon or dermatologist. Pressures during medical school are strong. Too often they force a student away from the most suitable career into one with elegant externals. Present day teaching is done by specialists in large hospitals with at least some element of ivory tower. The patients are those whose problems are

beyond the scope of the general physician, or are examples of errors in diagnosis or treatment. Representing but a small fraction of his practice, the errors are exposed in glaring light and the practitioner is held in low esteem. But the main fault has been the lack of interest in general practice. The decline of the family doctor may reflect a decline of the family. Till recently general practice has had little attention and less constructive thought from medical educators, specialists or indeed the public at large. Part of the bad press of medicine results from the failure of the general physician to be an effective spokesman for his cause or to find one. Much criticism is against situations no longer prevalent. It is the traditional prerogative of the public to criticize but the confusion of both the public and the doctor has resulted in lack of understanding and appreciation which has put medicine in a bad light.

The man with sound training in the principles and practice of medicine, doing general work, offers intimate personal service to patients who can turn to him at all times and all places when in need. Sound diagnosis and therapy assure him a satisfying existence and a satisfactory practice. No other physician has what he has to offer or can expect such personal satisfaction. The experienced physician in rural and semi-rural areas has a place in community life no other doctor has and indeed few others in any profession have.

The history of specialization in medicine goes back as far as we have any records at all. It is hinted at in the

fragments of Egyptian records in the papyrus. The medico-religious cults of Rome paid tribute to God and Caesar simultaneously in a system of minor tutelary dieties with a specialist god for each separate trouble. Even the itch had Scabies to call upon. And there was Angina for quinsy and Febris for malaria. Fixtula and Hernia had their niche in the feminine theocracy. Hypnos and Hygeia were enthroned in awe and respect. As time went on this super-specialization was laughed at. Cicero makes Crassus observe that all arts are degraded by subdivision—"Do you suppose that in the days of the Coans and Hippocrates, there were special physicians—some for wounds and others again for the eyes?"

Before we assail the problem of the individual specialists in medicine and in science, let us look at some dangers. These I approach with a series of quotations. They must be viewed against the inevitability of specialism as facts accumulate and knowledge overmasters even the soundest intellect.

Here is what Ortega y Gasset has to say.

It would be of great interest, and of greater utility than at first sight appears, to draw up the history of physical and biological sciences indicating the process of increasing *specialisation* in the work of the investigators. It would then be seen how, generation after generation, the scientist has been gradually restricted and confined into narrower fields of mental occupation. But this is not the important point that such a history would show, but rather the reverse side of the matter: how in each generation

the scientist, through having to reduce the sphere of his labor, was progressively losing contact with other branches of science, with that integral interpretation of the universe which is the only thing deserving the names of science, culture, and European civilisation.

What happens is that, enclosed within the narrowed limits of his visual field, he does actually succeed in discovering new facts and advancing the progress of the science which he hardly knows, and incidentally the encyclopedia of thought of which he is conscientiously ignorant. How has such a thing been possible, how is it still possible? For it is necessary to insist upon this extraordinary but undeniable fact: experimental science has progressed thanks in great part to the work of men astoundingly mediocre, and even less than mediocre. That is to say, modern science, the root and symbol of our actual civilisation, finds a place for the intellectually commonplace man and allows him to work therein with success. The reason for this lies in what is at the same time the great advantage and the gravest peril of the new science, and of the civilisation directed and represented by it, namely, mechanisation. A fair amount of the things that have to be done in physics or biology is mechanical work of the mind which can be done by anyone, or almost anyone. For the purpose of innumerable investigations it is possible to divide science into small sections, to enclose oneself in one of these, and to leave out of consideration all the rest. The solidity and exactitude of these methods allow of this temporary but quite real disarticulation of knowledge. The work is done under one of these methods as with a machine, and in order to obtain quite abundant results it is not even necessary to have rigorous notions of their meaning and foundations. In this way the majority of scientists

help the general advance of science while shut up in the narrow cell of their laboratory, like the bee in the cell of its hive, or the turnspit in its wheel.

And the dangers Sherrington emphasizes—"When a single *specialization* becomes highly effective for its purpose, it tends to become so inextricably entangled in the circumstances of a particular place and time, that it can never be disentangled. That is, evolution can forget that places and times change, and that the surround is always becoming another surround. A specialization outlives its use. It can become a fatal encumbrance."

And we wind up the broad, general problem with Bernard Shaw's sardonic jibe, "No man can be a pure specialist without being in the strict sense an idiot".

And now specialization as a few physicians have seen its hazards. Austin Flint, in his striking posthumous work, "Medicine of the Future," warned:

"A dangerous tendency is to such a limitation to a specialty as will lead to withdrawal from the common interests of the profession. A medical specialist should not thereby, in his sentiments and conduct, be any the less a physician: the honor, dignity, and usefulness of the profession, as a whole, should be as sacred in his estimation as if he were not a specialist. If the effect of specialism be otherwise, alas for the medical profession of the future, as regards the respect of others and the self-respect of its members!"

MacNider emphasizes the proper background for all medical specializa-

tion in comments on a fine psychiatrist. "He was first a good doctor and second, erected on this sound bedrock of general medical understanding, came his specialization as psychiatrist."

THE SOURCE AND VARIETY OF MEDICAL SPECIALTIES

One class of specialties in medical practice is those which have splintered off from general or internal medicine using diverse ages as the line of cleavage. From conception to birth the obstetricians have staked out their claims. Immediately after birth, but not an instant sooner, the pediatrician rushes in and, sometimes distracted by the notion that children are not people, hangs on till some arbitrary milestone at the illdefined boundary of puberty. Then the doctor who flourishes under the name internist (perhaps to be sure to avoid any implication of being a dermatologist) holds the victim until the gerontologist clutches him. Thus age is responsible for one general and three special fractions of health and disease.

Next a technique of therapy has chipped away a substantial group. Of these the most formidable group is the surgeons. Sometimes they are upset when I remind them that the name of their branch of medicine linguistically is the exact counterpart and has some of the same origin as chiropractor—the hand worker. While today the wise and well trained surgeon uses operative technique as only a part of his management of the sick, it is the essential part. Whenever today's physician feels the urge to

chide his surgical colleagues, he should remember with gratitude how the barber surgeon kept alive the practical arts of caring for the sick while the physician, occasionally deigning to look at the urine but rarely at a patient, was lost in the webs of stratospheric speculation and confusion. Other specialties depending on a technique for their *raison d'être* outside the central body of medicine include Radiology, Physical Medicine, Psychoanalysis, and Anesthesiology.

Another group of specialists are separate from general medicine on a typographical basis. Each has set its fence around a piece of the body or several pieces connected by function or juxtaposition. Among these specialties are Dermatology, Ophthalmology, Otorhinolaryngology, Gynecology, Urology and Orthopedics.

And finally there are the specialists separated by ideology. These include Preventive Medicine, Public Health, Psychiatry, and I suppose we should put up a fence for administrators, both deans and hospital administrators, though many are not physicians by training or inclination.

If we want to divide by sex we can make a separate bundle for gynecology and obstetrics.

Within the ample domain of general or internal medicine sub-splintering goes on along the same lines. But where they are taught and practised best cardiology, allergy, endocrinology, neurology, hematology and nutrition are wings of a single mansion and not outhouses.

Now I would like to quote from one of my favorite authors, myself.

"At a time when industry has found that pride in craft and contribution toward accomplishment is a stronger morale builder than wages or hours, we should see to it that the lesson is not lost on those who by design or by fate practice medicine in swarms. There is real danger that our patient may disappear as a person, John Smith, and become in fact that dry abstraction, the Common Man, whose conception is presided over by a conceptician, his birth attended by an obstetrician, his early days spent in the hands of a pediatrician, his burst into adult life in the hands of an adolescentist, and who during life is buffeted about among all the '-icians' and '-ists.' At length he begins to become unstrung under the careful guidance of a climacterician. Finally the shriveling atrophy of old age is lubricated by the attention of a geriatrician until, be deviled, bewildered, bemused, he falls exhausted off the end of the conveyor belt into the hands of the mortician. And all along the vast lockstep procession, teams and relays of specialists take turns at their posts on the day shift, the swing shift, and the graveyard shift, each to adjust one bolt, solder one wire, turn one screw, or take away bits of the wreckage; and the Common Man as he bounces along uneasily on his medical pilgrimage over the conveyor-belt road has no guide or companion unless he finds a personal physician".

What makes a budding doctor see
Which is his special, specialty?

Does just the wise one do his derdest
To pass the Boards as an internist?
Does surgery recruit great thinkers
Or manic, money grabbing tinkers?
Do those with fears and wire twists
Find solace as psychiatrists?
It is because their nostrils close
That some physicians pick the nose?
Are they frustrated engineers
Our orthopedic gadgeteers?
Do they reject frivolity
And people, in pathology?
Do those who're blind or cannot hear
Confine themselves to eye or ear?
Do those who did not work in classes
Seek a career in fitting glasses?
Are skin disease's devotees
Lured by short hours but longish fees?
With technics of some famed fan
dancers.
While veiling, I'll suggest the answers.

Analysis of motives for joining the exclusive clubs of the several specialties is full of danger. Only those sorry souls who are devoid of humor will reject this effort at needed therapeutic decompression of the pompous. Since they are not aware of any difference between flatus and afflatus, it doesn't matter. So at the risk of calling down on my head the powerful ire of my medical brethren in the splintered sub-units of medicine, I proceed. Sir Robert Hutchinson, in a lecture to medical students once remarked, "Gentlemen, I have recently contracted matrimony. If Providence sees fit to bestow progeny and that progeny be the male sex, I shall one day have to consider his future. If he be a brilliant lad, far above normal, I shall make of him a physician. If he be merely normal, I shall make of him a surgeon. If he

be slightly subnormal, I shall make of him a gynecologist. But Gentlemen, if he be absolutely mentally defective, I shall make of him an ear, nose and throat surgeon."

Why does anyone go into internal medicine? Lacking the organizing, unifying lines of the chemist, can it serve as an effective U. N. or supreme court for separate, sometimes hostile, often competitive, Balkanized principalities of the diverse specialties. I'm afraid internal medicine feeds the God-complex. My specialty favors the rise of the pontificator and the stuffed shirt. Unless tinctured by humility, it nourishes pomposity. Its hidden motto is "know it all". Impossibly demanding, its devotees may feel its extravagant demands without recognizing their own limitations. To the layman the internist may seem a happy blend of intellectual innocence and worldly wisdom, but the same layman, when ill, expects and often gets integrity and skill, but not as often as he desires, humane love.

A few comments about different specialists, I quote from a number of sources.

"Doctors may be divided roughly into physicians, who know a lot but can't do anything, and surgeons, who can do a great deal but don't know very much."

"Pediatricians enter their profession under illusion that children are easier to handle than adults, and then spend their lives treating parents."

"The radiologist rejects the patient altogether, looking through him, not

at him, in the fluoroscopic room, and studying his scant ectoplasmic shadows on the X-ray film. The retreat is that of the child and his picture book, away from reality."

Frustrated engineers have an important place in certain medical specialties. The bridge builder becomes the bone setter, intent on stresses and struts, girders and girdles. As for the obstetrician he should have been a mining engineer, removing rich treasures from their hiding, doing best when he does least and erecting a fantastic mythology of turns, stresses, stages of labor which have little connection with reality but which divert the inventors and satisfactorily plague the undergraduate student. We must not forget the urologist, medicine's errant hydraulic engineer. He lives, bemused by tubes and pipes, pressures and streams, dams and conduits—happy when sphincters are snapping off and on, but even merrier when he emulates the plumber with his multiplex armamentarium, if not his dilatory forgetfulness in "getting the drains open." He measures his life in gold, urinary and mercenary with his main sentiments about sediments.

"Anesthetists and psychoanalysts share the curious similarity of having the patient in a helpless position, flat on his back and approaching him from the ancient position of ambush. Both induce sleep in one form or another." I can make little out of this useful observation.

"Neurologists may have gone astray trying to copy the engineers who gave us the complexities of the telephone and automatic switchboard. This clue might

help us explain another hybrid, the worshipping at the shrine of cybernetics. We have now come to the really advanced stage of civilization when men can make a good living by going about proclaiming to fascinated audiences that the mind does not exist." I do not agree that merely uttering the word feedback permits one to assume that he has climbed the mental pinnacle called clarity and truth.

I have many more but, like all generalities, they are but partly true—emphasizing out of context.

I have made the assumption that we are mature enough to visualize our motives stripped bare of camouflage, without favour and without fear. We are the first generation raised by those who accepted the impulses Freudian psychoanalysis gave to psychiatry that personal responsibility was the bane leading us to trouble. The selfish needs, desires or wishes of the individual, the old Adam, must be gratified at all costs or the person would go off the track. Everyone else be damned. The model for social behavior is the apotheosis of selfishness. But every mental institution is full of evidence to prove that complete self-centeredness is a most awkward organizing principle for such creatures as we are. Again from insights developed along these lines is the realization that what we feel about others may reflect flaws within ourselves. Sensible persons now realize that their fears, hates and angers do not necessarily mean that the recipient is evil or wrong. Often we can say with truth, that

The fault, dear Brutus, lies not in our stars,
But in ourselves, that we are underlings.

Thus, from a surprising source, have come grounds for defending humility.

CONCLUSION

Most people go into medicine from a combination of practical and idealistic reasons. No one any longer drifts in. He can't be a doctor just because he wants to be one. The average person takes up medicine with no idea of consecrating his life but because he wants to earn a living in a useful and honorable profession. A physician can achieve nobility from an ambition no more exalted than of being a companion to his patients, a little, taller a little stronger and a little wiser. The practice of medicine after a longer apprenticeship puts one immediately into a position of respect and a chance to gain trust. It allows independence of judgement and action. It encourages the use of the intellect. If he achieves intellectual honesty, the physician is beholden to no man, no political group, no industrial machine. He may raise his family worthy of the approval of his fellow man. If he works harder and longer than the money-changer, the rewards though different are proportionate. He may even find one of the ways for reaching man's potential for natural dignity and honor.

Most of us engaging in the practice of a profession never analyze our reasons for selecting it. Some acknowledge accident and circumstance as the chief movers. To over-simplify a very complex problem, we become physicians from a mixture of motives compounded

of altruism, curiosity and the search for power. Each is solving his own problems, satisfying his needs, and is driven by many forces never reaching the level of conscious motives.

Even the most cynical critic admits that a deep human impulse to help others has flourished in, and has made possible growth of, societies of people living together. At its best it takes on a religious aspect. At the other extreme it is now worse than the wish to acquire merit. The virtue altruism still lives today without press agent or ballyhoo as a force leading youth into the profession of medicine. It may be declining. It is unfashionable, but still very important.

Curiosity, simple wonder at the marvelous and strange ways of nature, is another aspect of man which sets him apart from his fellow creatures. On it depends our understanding of the world about us. What forces are behind the mystery of generation, and growth, and life and death? What of the workings of our bodies, the meaning of health, the processes of disease? Contemporary education tends to stifle curiosity, and in our age of conformity the pioneer spirit of our forebears finds hardly any other outlet than in professions which depend for advance on the active probings of the inquiring mind. Research in medicine offers the thoughtful and curious person a challenge because of the infinitely various complexity of its problems. Its intellectual satisfactions are great. It permits one to deserve the ultimate accolade of a thoughtless age the brevet of "egghead".

The search for power is derived from all the ancient forces which enabled evolving man to thrive in a hostile world. In modern life, power usually is equated with things and money. Some is needed for survival. But power grows as an obsession. It may be an end in itself, without useful purpose. In medicine power may also satisfy a need to exercise authority to bolster a sagging or stunted ego. Most often it is the power of getting ahead of the Joneses. The prestige of material display in an age of childish delight in things has become a dominant drive in our machine oriented society. When power assumes the main or exclusive motivating force, medicine becomes just a business. Both physician and patient suffer. Think how amazed you would be if when you were sick you went to your physician and he told you that he personally had never cared anything about the art of medicine, that he never read current medical journals.

— Reproduced from the A.M.A. Archives of Internal Medicine, June 1957, Vol. 99, PP 847-858

Effect of Antimitotic E 39 On Malignant tumours of the Eyelids. Prof. A Pillat (Vienna)

(Read before the International Ophthalmic Conference held in Brussels on 9th-12th Sept. 58. Free paper No. 65 published in Excerpta Medica)

The author has carried out experiments with the antimitotic E 39 (Bayer) and has shown that it is possible without risk to the Patient, to treat malignant tumours of the eyelids with local injection of this E 39 (Bayer) given every 15 days or so. The author has reported several cases cured by this method.

paid no attention to the study of new treatments, and that he thought it really quite unimportant whether patients were sick or well, that he was really interested only in making a lot of money. What would you think of him?

The profession of medicine and its practice encompass the practical arts, basic science and applied science. The practical arts of medicine are nourished by altruism; the basic sciences are supported and embellished by curiosity; and the applied sciences live on power and feed it. Such motives govern our lives. In varying combinations they guide us in our choice of life work, and in doing it. The satisfactions of practicing a humane profession and the intellectual pleasures of exercising and sometimes satisfying curiosity are its real rewards. We must never lose them in a drive for power. For me, a physician, Life's great mystery is how people can be happy doing anything else.

GLEANINGS FROM THE MEDICAL PRESS

NEOMYCIN IN THE TREATMENT OF HEPATIC COMA: A. M. Dawson, J. McLaren and S. Sherlock. Lancet, 2:1263-1268 (Dec. 21, 1957) via J.A.M.A.

It seems probable that the syndrome of hepatic precoma and coma in patients with liver disease is often related to the absorption of toxic substances from the intestine. These substances are probably derived from bacterial action on nitrogenous material. Hepatic coma has been treated by withdrawal of dietary protein, purgation, and oral administration of chlortetracycline with encouraging results. As liver function is impaired further, even complete protein withdrawal may prove ineffective. It is in this group that an attempt may be made to suppress gastrointestinal bacterial growth by long term antibiotic treatment. Orally administered neomycin is the obvious choice, for it is effective in decreasing the gastrointestinal formation of ammonia, an index of bacterial action on proteins. The authors treated 12 patients with acute hepatic coma and 8 with chronic portal-systemic encephalopathy (intermittent stupor) with neomycin for periods upto 10 months and observed the clinical state, blood-ammonium levels, and bacteriology of the stools. Of the 20 patients, 19 of whom 5 were chronic alcoholics, had cirrhosis of the liver, and had acute viral hepatitis. Neomycin sulfate was given in daily doses from 4 to 10 Gm.

Six patients with chronic cirrhosis showed pronounced clinical benefit, which was associated with a fall in the fasting arterial-blood-ammonium level and an improvement in the electroencephalogram. One patient had a relapse after 10 months' treatment. Feto-

hepaticus was abolished in 6 of 7 patients with chronic disease. The fasting arterial-blood-ammonium level rose gradually under treatment with neomycin. The effect on the stool flora was variable and could not be correlated with clinical benefit or with the fall in arterial-blood ammonium level. Purgation induced a partial remission in 2 patients but was not as effective as neomycin. Seven of 12 patients with acute hepatic coma showed initial improvement, but other forms of treatment were used simultaneously. Neomycin treatment had to be stopped in 2 patients owing to severe diarrhoea. Since neomycin is expensive, it would have been difficult to conduct this trial without generous gifts of the antibiotic. Although its routine use is necessary in acute hepatic coma, continuation over many months may prove financially impossible. However, it is difficult to withhold neomycin if it means the difference between chronic invalidism and productive work. Attempts must be made to stop treatment with neomycin, but in many instances it will have to be resumed. Patients with continuing deterioration of liver function may eventually prove refractory to this treatment.



SEVERE REACTIONS TO ANTIBIOTICS. A NATION WIDE SURVEY. H. Welch, C. N. Lewis, L. H. I. Weinstein and B. B. Boeckman. Antibiotic Med. 4: 800-813 (Dec. 1957) New York, via J. A. M. A.

The nationwide survey reported was designed to include a total of more than 800 hospitals and interviews with more than 1,600 physicians. Each of the 16 districts of the Food and Drug Administration, which cover the entire country, was assigned a proportionate number of physicians and hospitals for investigators to visit, and all case reports and other pertinent data were obtained by trained investigators, each familiar with the likely sources of such

information in a particular locality. The number of cases "missed" in the areas investigated was probably small. Penicillin was found to produce the greatest number and the most severe reactions of all antibiotics presently available. Anaphylactoid shock was the most frequent of the serious reactions to penicillin and resulted in a death rate of about 9%. The vast majority of reactions to penicillin occurred when the drug was administered intramuscularly. In order of their frequency, the life-threatening reactions to antibiotics are shock, superinfections, severe skin reactions, blood dyscrasias, and angioneurotic edema with involvement of the respiratory tract. The most frequently occurring minor (non-life-threatening) reactions to antibiotics are angioneurotic edema and urticaria. The broad-spectrum antibiotics cause relatively few adverse reactions, most of which are classified as not severe.

The tetracyclines account for most of the cases of severe enterocolitic superinfections. About 75% of the cases of enterocolitis were micrococcic (staphylococcic) superinfections, and of these about 60% occurred after abdominal surgery. The mortality rate in micrococcic enterocolitis was 34%. Enterocolitis in which no cultures were obtained also occurred chiefly after abdominal operations, with a fatality rate of 52%. Of the severe, dermal reactions, the most frequent was exfoliative dermatitis; 10% of the cases were fatal. Erythema multiforme and anaphylactoid purpura accounted for the other severe dermal reactions, one of which terminated fatally. Aplastic anemia was the most common and accounted for 23 of the 27 deaths in the blood dyscrasia group. The cases of blood dyscrasia were most frequently associated with the use of chloramphenicol. Angioneurotic edema with involvement of the respiratory tract was most frequently caused by intramuscular injections of penicillin; of 38 cases reported, 5 were fatal. This survey reemphasizes

the need for caution in the administration of antibiotics. The increase in the frequency of reactions results more through the wide use of a highly antigenic substance than from indiscriminate use. When tetracyclines are used, particularly in patients undergoing an abdominal operation, the possibility of the development of micrococcic enterocolitis must always be kept in mind.



OVERWEIGHT AND HYPERTENSION:

T. Bjerkedal. *Acta med, Scandinav.* 159: 13-26 (No. 1, 1957) English. Stockholm, via JAMA.

The author reports on 14,784 adult persons who were employed in 112 industrial plants in Norway and whose records made by plant physicians contained complete information as to sex, age, body weight, height, and systolic and diastolic blood pressure given in millimeters of mercury. There were 11,063 men and 3,721 women. The data of these persons showed that the average systolic diastolic blood pressure rises with increasing relative body weight in all age groups. By comparing the frequency distributions of the systolic and diastolic blood pressure values in group of persons underweight, normal weight, and over weight of the same age, it was found that with increasing weight the distribution curves of blood pressure values shift slightly to the right without essential alteration of the shape of the curves. This seems to indicate that the main influence of obesity on the blood pressure is a small increase in the systolic and the diastolic blood pressure values in all persons, since there is no distinct accumulation of persons with very high blood pressure values among the obese.

This small increase in blood pressure value is believed to depend on the effect of the circumference of the upper arm on the

auscultatory blood pressure readings. The increase in blood pressure averaged from 1 to 2 mm. Hg between 2 consecutive 5% weight groups. These findings are in agreement with what might be anticipated in the light of Ragan and Bordley's measurements of blood pressure by the direct (intra-arterial) and the indirect (auscultatory) method which disclosed the too-high auscultatory measurements in persons with large arms. This small increase in the measured blood pressure in obese persons may explain why in some earlier studies a higher incidence of persons with hypertension were found in this group, when the upper limit of normal blood pressure was placed at 140/90 mm. Hg. Contrary to the common assumption that there is a higher incidence of persons with hypertension among those who are over-weight, the conclusion drawn from this study is that there is no relationship between obesity and hypertension.



ALLERGIC REACTIONS TO DRUGS:

Allergic reactions to drugs may have consequences which are out of all proportion to the conditions for which many drugs are given. Because of this, every attempt should be made to eliminate needless administration of drugs and, when possible, to give them under conditions which appear to be least conducive to the development of allergy. Accordingly, it will probably be in the best interest of the patient to prescribe the fewest number of drugs compatible with effective treatment, to give drugs orally when possible rather than by injection, to question the patient first as to the past occurrence of untoward reactions to drugs and to avoid the topical administration of those drugs which are effective and safe when given by mouth or by injection. In those instances wherein there is the possibility that the patient may already be allergic, a short-acting rather than a long-acting preparation should be given: F. C.

NOVEMBER '58

Lowell, M.D., Allergic Reactions to Drugs, The Practitioner, June 1957.



A LACTOBACILLUS PREPARATION FOR USE WITH ANTIBIOTICS:—C.

Douglas Gordan et al. *The Lancet* 1: 899-901, 1957.

The bacteriological effects of 'ENPAC' on patients between the ages of 1 and 13 years, receiving Tetracycline, 10 mgm per Kgm body weight per day for 5 days, were investigated by the authors. It was limited to patients suffering from respiratory streptococcal infections and scarlet fever. ENPAC, a lactobacillus preparation, is a culture of strains of *L. acidophilus* together with complete growth factors and nutritives. The side effects of treatment with antibiotics include intestinal disturbances which vary in severity from mild diarrhoea to fatal super infection by resistant organisms. Their chief cause is thought to be the partial destruction of the natural intestinal flora and hence in the absence of competitive and of inhibitory substances, such as lactic acid and hydrogen peroxide, produced by the normal flora, antibiotic resistant pathogens can flourish. These effects could be prevented if during antibiotic therapy, saprophytic organisms were introduced into the bowel in sufficient numbers to become established. The patients were divided into two groups. Every alternate person of one group was given ENPAC 3 gms four times a day during administration of the antibiotic and succeeding four days. Faecal specimens of all cases were examined bacteriologically at intervals before, during and after treatment. It was found that the staphylococci increased in both groups at the beginning of antibiotic therapy. Staphylococci continued to increase in patients taking the antibiotic alone, but in those taking ENPAC there was a pronounced drop in numbers following the initial rise. Simultaneously, in this later group the lactobacilli were rapidly

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established and continued to multiply. This followed the elimination of the normally nonresistant lactobacilli by the antibiotic during the early days of treatment.

ANTIBIOTIC-RESISTANT STAPHYLOCOCCI—Although hardly comparable with respect to numbers of organisms killed and the speed of killing, erythromycin and chloraphenicol in combined large dosage have proved to be an effective combination to control growth of penicillin-resistant organisms. These two, with perhaps becitracin for a few days, have proved to be as effective a combination in therapy of human infections as has been described. It has been our impression, both in vitro and vivo, that staphylococci whose resistance to penicillin is greater than 0.15 u/ml. produce penicillinase and are for practical purposes, penicillin-resistant. Penicillin in clinical therapy is useless in infections caused by those strains of staphylococci similarly other single drug therapy has resulted in increasing numbers of strains of staphylococci resistant to multiple other agents. In such circumstances the agent is of no clinical value either. Irrespective of the importance of the epidemiologic aspects of penicillin-resistant staphylococci, it cannot be concluded that the infection hits only old persons in the hospital whose admission was necessitated by some other debilitating, noninfectious disease...They do, however, probably occur more often in patients receiving antibiotics for some non-specific "prophylactic" reasons than in patients not so "protected". To date no agent or combination of them is as efficacious as penicillin was in the era when the majority of isolated strains were sensitive to it. Paul Bunn, M. D., Aldona Baltch, M.D., Winfred Osborne, B.S., and Leonard Canarili, B.S., *Staphylococci: On the Ubiquitous Nature of Human infections and their Control by Antimicrobial Agents. Singly or in Combination, Annals of Internal Medicine, January, 1958. (via) J. A. M. A., Vol. 166; No. 17—Page 2183.*

Notes & News

PROGRESS OF CONTRIBUTORY HEALTH SERVICE SCHEME

Shri D. P. Karmarkar, Minister of Health, in a statement placed on the Table of the Lok Sabha on September 18 in reply to a question on the working of the Contributory Health Scheme, said:

Since its introduction in 1954 there has been a very considerable increase in the number of beneficiaries served by the Contributory Health Service Scheme. At the time of its introduction the Scheme catered to a population of 2,23,000 for which 40 Medical Officers including 11 specialists were employed. The increasing use being made by Government servants of the services provided by the Scheme and the increase in the total number of beneficiaries (now over 4.0 lakhs) has tended to outstrip the increase in the strength of the medical and other staff but the staff has also been strengthened from time to time.

In a scheme of the size of the Contributory Health Service Scheme covering a population of over 4 lakhs it is difficult to avoid occasional complaints or individual difficulties. It is true that, in the initial stages of the Scheme, the Medical Officers had to work under conditions of great strain. However, with the opening of more dispensaries and strengthening of the staff the position has eased considerably.

There are at present 25 static and 3 Mobile Dispensaries under the Scheme as against 16 static dispensaries at the time of the introduction of the Scheme. Five more dispensaries have been sanctioned during the year, and 44 additional posts of Medical Officers have also been sanctioned.

NEW DISPENSARIES UNDER C.H.S. SCHEME

Four new static dispensaries have been opened during the current year under the Contributory Health Service Scheme, said

Shri D. P. Karmarkar, in a written reply to a question in the Rajya Sabha on September 22.

MONTHLY EXPENDITURE

In a written reply to a question in the Lok Sabha on September 23, Shri D.P. Karmarkar, said that the average monthly expenditure for the last three years incurred on the Contributory Health Service Scheme, including the expenditure incurred on the hospitalization of C. H. S. beneficiaries in hospitals other than the Willingdon and Safdarjang Hospitals, New Delhi, was: 1955-56 — Rs. 94,631; 1956-57 — Rs. 1,21,237; and 1957-58 — Rs. 1,43,942.

In a rough computation, on a proportionate basis, the average monthly expenditure for the last two years incurred on the C. H. S. beneficiaries on account of their hospitalization in the two hospitals was during 1956-57 — Rs. 1,11,417 and 1957-58 — Rs. 1,27,073.

The number of Government servants participating in the scheme, the Minister added, were 70,600 in 1955-56 and 88,000 in 1956-57 and 1957-58. Before the introduction of the Contributory Health Service Scheme, the Ministries Departments/Offices concerned were making provision for reimbursement for medical attendance and treatment in respect of Government servants employed under them.

CENTRAL AID TO OKHLA HOSPITAL

In a written reply to a question in the Rajya Sabha the Minister of Health, Shri D. P. Karmarkar, said that non-recurring grants amounting to Rs. 2,30,000 were paid to the Holy Family Hospital, Okhla, Delhi. No condition was attached to the grant except that the services of the hospital would be available to all persons without distinction of caste or creed or nationality. There were 150 beds in the hospital. The charges for treatment were

payable according to the schedule of rates prescribed by the hospital authorities. Concession was given to poor patients who were not able to pay the charges. The total amount spent on the hospital by the organization running it was Rs. 15,00,000 up to October 11, 1955.

The Minister added that the Government of India did not give recurring grants to private hospitals.

FOREIGN DOCTORS IN DELHI CHILDREN'S HOSPITAL

In a written reply to a question in the Rajya Sabha on September 16, the Minister of Health, Shri D. P. Karmarkar, said that there were six foreign doctors in the Children's Hospital in the premises of the Lady Hardinge Medical College for Women in Delhi.

The Minister said that the Russian doctors were still training the medical personnel of the hospital and assisting in teaching students, nurses and physiotherapists. They would also assist in post-graduate training in Paediatrics and Physiotherapy. A post-graduate Diploma Course in Paediatrics had just been instituted by the Delhi University and a similar course for Physiotherapy was also expected to be set up soon. They were also conducting joint research work.

Shri Karmarkar added that the Russian doctors did not hold any posts sanctioned by the Government of India. They were on deputation from their Government and their salaries were being paid by the U. S. S. R. Red Cross Society. Women doctors were being trained under these foreign experts.

CULTIVATION OF CINCHONA

Shri D. P. Karmarkar, Minister of Health, said in a written reply to a question in the Lok Sabha on September 18 that the cultivation of cinchona was being gradually decreased in West Bengal by not re-

planting the uprooted areas. In Madras, the acreage of cinchona plantations had remained stationary since 1953. The quantity of quinine extracted in 1955 in West Bengal and Madras was respectively 34378 and 19100 lbs., in 1957, 3580 and 34700 lbs. and in 1958, 12820 and 48300 lbs.

The quantity exported in 1958 was 14,000 lbs. The average consumption in the country was estimated to be approximately 20,000 lbs. per annum.

The Minister added that quinine had been used to some extent as a tonic in combination with other drugs. It was also used for improving appetite and in the treatment of dandruff. The quantities of synthetic antimalarial imported in 1956-57 were 27,949,135 kg. in bulk (Tabs: 4,17,440) and in 1957 21,379.66 kg. in bulk (Tabs: 45,00,000).

HEALTH CENTRES IN RURAL AREAS

Shri D. P. Karmarkar, Minister of Health, in a written reply to a question in the Lok Sabha on September 5 said that the health services centres in the rural areas to be opened under an allotment of \$3,654,000 by UNICEF according to an agreement signed in June 1957 would not be in addition to the 2,000 and 1,000 health centres planned to be opened in block areas under the Second Plan scheme.

MENTAL HOSPITALS

In a written reply to a question in the Lok Sabha on September 15, Shri D. P. Karmarkar said that there were 32 mental hospitals in India.

The Minister added that no survey on incidence of mental diseases in the country had been made on an All India basis. But it was estimated that the number of mental patients were not less than two per thousand of population.

GRANTS FOR TRAINING OF DAIS

The Union Ministry of Health has approved the training of 50 indigenous dais

under the Himachal Pradesh Administration at an estimated cost of about Rs. 9,000 during 1958-59. It has also sanctioned a grant of Rs. 10,000 for a hospital in Broach towards the training of auxiliary nurse-midwives. A sum of Rs. 5,000 has been sanctioned for the training of auxiliary nurse-midwives at the General Hospital, Nandyal.

NEW MEDICAL COLLEGE IN DELHI

Shri D. P. Karmarkar said in reply to a question in the Lok Sabha on September 2 that the new Medical College attached to Irwin Hospital, Delhi, started functioning from August 1. Sixty students had been admitted this year.

The Minister added that at present there was no proposal to co-ordinate teaching in the three Medical Colleges in Delhi, viz., Lady Hardinge Medical College, the All-India Institute of Medical Sciences and the new Medical College attached to Irwin Hospital.

MEHRAULI T.B. HOSPITAL

The Minister of Health said in a written reply to a question in the Lok Sabha on September 5 that admission of patients to the 52-bed T.B. isolation ward at the T.B. Hospital, Mehrauli had begun.

STEPS TO RESTRICT USE OF INSECTICIDES

In reply to a question the Union Minister of Health said in the Rajya Sabha on August 18 that it had been brought to the notice of the Government of India that some of the insecticides used for agricultural and other purposes were highly toxic to human beings. He also laid the following statement on the Table of the House on the steps taken to restrict the use of insecticides considered highly toxic to man:

(1) The insecticides and preparations mentioned below had been declared on August 8, 1958 as 'Poisons' under the poisons Act, 1919:

Insecticides:

Parathion; and tetraethyl pyrophosphate.

Redenticides:

Alpha-naphthol Thiorurea.

Fungicides:

Ethoxy ethyl, mercury chloride; ethyl mercury phosphate; phenyl mercury acetate; ethyl mercury chloride; phenyl mercury chloride; phenyl mercury urea.

Fumigants:

Methyl bromide and cyanides: viz: liquid hydrocyanic acid; sodium cyanide; potassium cyanide; calcium cyanide.

Preparations:

Any preparation containing any of the aforesaid poisons.

This declaration of insecticides as 'poisons', would regulate their possession, storage, packing, sale and labelling. These insecticides would also come under the category of Dangerous Goods for the purposes of transport by sea or by rail and would be subject to all the restrictions which were at present applicable under the rules made under the Indian Merchant Shipping Act and the Indian Railways Act.

(2) The following concurrent action was also being taken by the Government of India as well as the State Governments.

(i) the State Governments had been advised to declare these insecticides as 'Poisons' under the relevant State Acts and to regulate the storage, packing, labelling and sale of such insecticides by making suitable rules under the Poisons Act;

(ii) instructions were being issued that the containers for these insecticides, etc., should be the same in quality and kind as

those in which these insecticides were imported;

(iii) steps were being taken:

(a) to ensure that import trade control licences were issued only to sole agents of manufacturers of these insecticides;

(b) to educate the users of insecticides through N.E.S Blocks, Gram Sevaks, Gram Panchayats, District Boards, Extension Officers, etc., about the precautions to be taken in the use of these insecticides.

(3) instructions had been issued to the Directors of Agriculture in the State and Union Territories in the matter of precautions to be taken in the use of such insecticides and the publicity to be given about the hazards involved.

EVALUATION COMMITTEE FOR AYURVEDA

The Government of India have appointed a Committee to evaluate and assess the work done in the field of Ayurvedic system of medicine, it was announced in New Delhi on August 4. Dr. K.N. Udapa, Surgical Specialist, Himachal Pradesh, is the Chairman.

According to the terms of reference, the Committee will also go into the question of upgrading Ayurvedic institutions as a result of grants already given by the Union and State Governments, assess the existing facilities for training and research, determine the nature, volume and standard of Ayurvedic pharmaceutical products, and find out the position in regard to the practice and recognition of the Ayurvedic system of medicine.

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Dear Doctor,

If you have some specific problems relating to some of the cases you have in hand, kindly send us your questions giving the necessary details.

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Please state if the answer is desired before the date of publication. We shall endeavour our best to reply you direct as early as possible.

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The Editor is under no obligation to answer all or any question. Answers to queries by specialists are their own.

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Very truly Yours,

DR. B. RAMA RAU, B.Sc., M.B.B.S.

Editor

BOOK REVIEWS



We have pleasure in informing the various publishers of Medical books and periodicals, that the future issues of 'MEDISCOPE' will feature critical reviews of recent publications, by competent authorities.

May we therefore request the publishers to send us their publications for review at their earliest convenience.

—Editor

