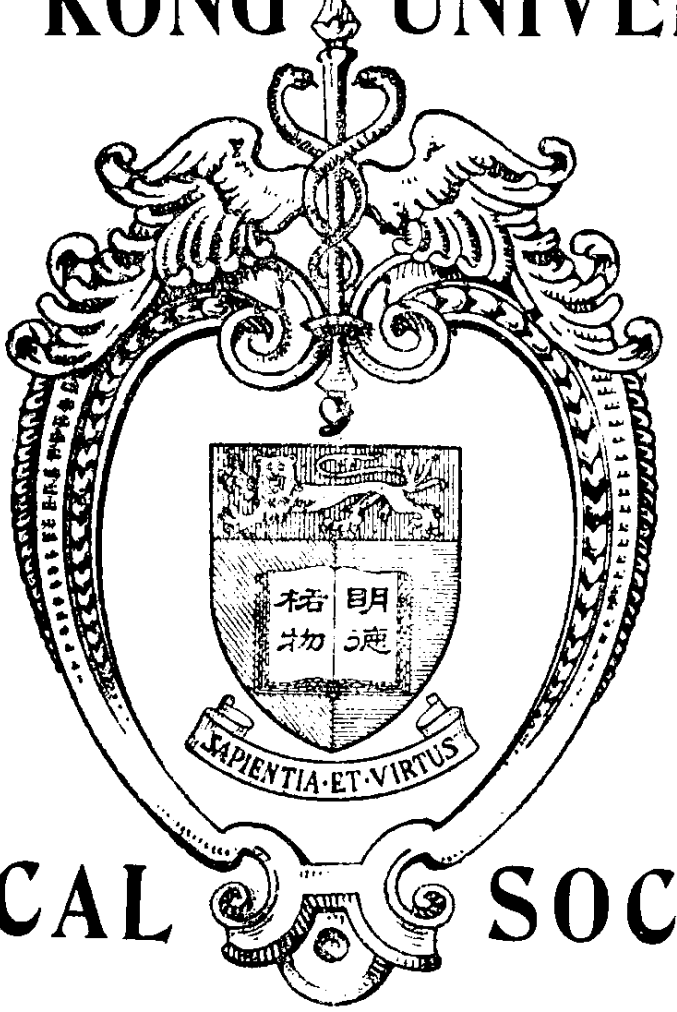
THE CADUCEUS

JOURNAL OF THE HONG KONG UNIVERSITY MEDICAL SOCIETY



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THE CADUCEUS

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CLINICAL REPORT OF THE TSAN YUK HOSPITAL AND OF THE MATERNITY BUNGALOW OF THE GOVERNMENT CIVIL HOSPITAL. BEING THE WORK OF THE SCHOOL OF MIDWIFERY OF HONG KONG UNIVERSITY.

May, 1934—April, 1935.

by

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ADMISSIONS TO THE MATERNITY WARDS.

For the year ended 30th April.	*Admissions.*	*Total Deliveries.*
1926	465	463
1927	865	826
1928	1,646	1,576
1929	1,944	1,811
1930	1,778	1,616
1931	1,974	1,841
1932	1,927	1,809
1933	2,018	1,893
1934	2,121	1,985
1935	2,408	2,351
Total	17,146	16,171

Morbidity rate ..... 6.4. Maternal Mortality Rate ..... 0.43%.

MATERNITY DEPARTMENT.

During the year ended 30th April, 1935, there were 2,408 Admissions to the Maternity Wards, and 2,351 Deliveries. This constitutes a record for the Department during my ten years of Office, and it is particularly gratifying to be able to report that the admissions and deliveries have shown a steady increase during this period.

The Maternal Mortality rate also shows a slow but steady improvement, as it has been less than .5% during the last three years, all deaths included whether attributable to Obstetrical causes or not. The figures for these years are as follows:—

For the year ended April 30th.	*Morbidity rate.*	*Mortality rate.*
1926	7.7%	1.08%
1927	10.1%	1.72%
1928	8.4%	.51%
1929	11%	.51%
1930	5.3%	.45%
1931	3.9%	.32%
1932	7.4%	.55%
1933	6.5%	.4%
1934	6.15%	.25%
1935	6.4%	.43%

In the year 1925-26 we took over only the care of the patients in the Maternity Wards in the Government Civil Hospital, but in 1927—those of the Tsan Yuk in addition. This explains why the admissions and deliveries in 1928 were so much greater than in the two preceding years. The mortality and morbidity rates in a maternity clinic are usually higher in its early years, than after it has been a going concern for some time, and the difficulties to be contended with are far greater in Tropical countries than they would be in the British Islands. Not only are there difficulties to be overcome, but the entire staff have to get used to one another, and learn to work together to the best advantage. And lastly we had all to get used to local conditions, to learn what general diseases were common complications of the puerperium, and to learn something of the people themselves. All these things take time, particularly in the East.

This Report marks the close of my association with the Medical School of Hongkong University where I have held the Chair of Obstetrics & Gynaecology since 1924. This Chair was founded by the Rockefeller Foundation, and on my appointment they were good enough to invite me to America to visit their hospitals. In 1930 the University

granted me three months' study leave, (in addition to home leave) which gave me an opportunity of visiting the principal European Clinics, which I did at my own expense. I am greatly indebted to Dr. Gregg of the Rockefeller Foundation for his kindness in giving me introductions, and much useful advice, and information. I wish to take this opportunity of thanking the officers of the Rockefeller Foundation for their courtesy during all my term of office, and during my visit to the U.S.A.

Dr. Pillai was Assistant to the Department from May 1925, to December 1934, and when I left Hongkong for good in May 1935, I had the pleasure of knowing that he had been appointed Acting Head of the Clinic during the interval between my departure, and the arrival of my successor, Prof. Nixon. I know from experience that Dr. Pillai is a good teacher, and operator, and popular with the students.

Dr. Yang is now 1st Assistant. I have known him both as a student and since he qualified. He was for some years in Dublin, working both at the Rotunda, and at Steevens' Hospital. He obtained the diploma in Gynaecology and Obstetrics of Dublin University, and the F.R.C.P.I., and has shown himself to be both hard working and reliable, he joined the Department in January 1935. There are many present and past members of the Staff who have rendered valuable services, and among them I would specially like to mention Dr. Cheung, lately my 2nd Assistant, and Dr. H. Y. Cheng who has been associated with the Clinic in one appointment or another, for about three years. Whatever results we have obtained, and whatever improvements we have been able to bring about have only been done with the help and loyal co-operation of the Medical and Nursing staff, to all of whom I am greatly indebted.

Out of the total of 2,251 deliveries, 694 were primiparae, and 1,557 multiparae. Live Births numbered 2,121, abortions and miscarriages—32, hydatidiform mole—8. The causes of death were—

Prematurity	29
Macerated	27
Various causes	34

The last heading includes two destructive operations, two cases of anencephalus, one foetal ascites, and one monster.

FORCEPS.

The forceps were applied 60 times, that is an incidence of approximately one in 37 of all cases.

All the mothers recovered, but 7 children were born dead, giving a foetal mortality rate of 2.6%. In 45 cases the indication was delay in the second stage of labour. In nine cases the occiput was posterior, and it is interesting to note that in all these the infants were born alive. In two cases of Eclampsia forceps were applied, both infants were born alive. In two cases the induction of labour was followed by the application of forceps.

BREECH.

There were 65 cases of breech presentation, 25 were primiparae and 40 multiparae. Twenty-two infants were born dead, giving an infant mortality rate of 33.8%. Of these—two cases were associated with prolapse of cord, eight infants were macerated, seven were premature, five miscarriages, one hydrocephalus, one monster and two cases occurred in association with placenta praevia.

PLACENTA PRAEVIA.

This condition occurred on ten occasions, there was one maternal death, and six of the infants were born dead. Out of the total, eight were premature, for example—in 4 cases pregnancy had only lasted for 30 weeks or less, in one case 32 weeks, in two cases 34 weeks, and one case 37 weeks. The remaining two cases were at term. Under these circumstances a high foetal mortality rate is perhaps to be expected, particularly when it is born in mind that patients are often only admitted after either a severe haemorrhage has occurred, or after mild haemorrhage has been occurring for several days—conditions which are not favourable to the infant. It must be remembered that as far as hospitals are concerned, the Chinese are more tolerant of illness than are Europeans; by this we mean that they are slower to seek medical aid. Six of our cases were treated by Bi-polar version, which we still regard as the most suitable method to adopt in most cases. In two cases internal version was performed, in one case of lateral placenta praevia as the head was fixed, labour was allowed to proceed normally and the mother recovered and the infant was born alive. In one case of marginal placenta praevia, a similar course was adopted, but unfortunately the infant was not alive.

ACCIDENTAL HAEMORRHAGE.

There were 8 cases of Accidental Haemorrhage, 2 were concealed, and 6 revealed. Two of the mothers died, and 6 of the infants were born dead. Six cases were treated by artificial rupture of the membranes. Details of the maternal deaths will be found under the heading of mortality. Three of these cases were associated with post partum

haemorrhage, which is a not uncommon complication of accidental haemorrhage. In one other case the placenta was retained and had to be removed manually.

PROLAPSE AND PRESENTATION OF THE CORD.

This condition occurred 6 times, all the mothers recovered, but 4 of the infants were born dead. Three of these cases were seen too late for treatment to be of any avail. In one case the baby only weighed 2 lbs. 4 ozs.

DESTRUCTIVE OPERATIONS.

Craniotomy was performed once on a primipara, forceps having failed to deliver, and the baby being dead. One infant with hydrocephalus was perforated, and 60 ozs. of fluid withdrawn.

CAESAREAN SECTION.

Much has been written on the subject of Pelvimetry, and the indications for Caesarean Section, but when all is said and done the incidence of this operation is mainly governed by the incidence of contracted pelvis, which in its turn is largely governed by the incidence of Rickets. The latter disease is very rare among the natives of South China, the rarity of face presentation, for example, gives a very good idea of the rarity of flattened pelvis. Out of 10,955 cases in Hongkong, face presentation occurred 15 times, whereas in Dublin, out of approximately 10,000 cases, face presentation occurred 58 times. During the year Caesarean section was performed 5 times, on all occasions during labour, 4 of the mothers recovered, and 4 of the infants were born alive. On two occasions the classical operation was chosen, and on three the Lower Segment operation. One case was a "repeat operation", for contracted pelvis due to tubercular disease of the hip. Another was performed in a primipara for a neglected Brow presentation, after attempts at correction had failed, unfortunately the infant did not survive. In one case the indication was an ovarian cyst which obstructed delivery, the tumour was removed at the same time. There was one case of generally contracted pelvis, and one operation was performed for cicatricial contraction of the vagina. Atresia is sometimes sufficiently marked to require a Caesarean Section, the scar tissue is usually attributable to attempts of unskilled midwives to effect delivery at a former confinement.

ECLAMPSIA.

There were nine cases of eclampsia, 5 were entirely antepartum, 3 were post partum, and 1 combined. There were 2 maternal deaths.

In 6 cases the infant was born alive. In one of the cases in which the mother died, she had had only two fits, and died undelivered. Five of the patients were primiparae.

There has been no essential change in treatment during the year, Tweedie's treatment, with slight modification being adopted as a routine. One patient who had had 18 fits recovered.

MORBIDITY.

The Morbidity rate of the Tsan Yuk Hospital for the year was 5.2%, and for the Maternity Bungalow, at the Government Civil Hospital—7.6%. On the whole the health of both hospitals was good, and no serious epidemic of a general medical nature was in evidence in our wards.

MORTALITY.

There were 11 maternal deaths, giving a maternal mortality of .43%. The causes of death were as follows—

Placenta praevia	1 case.
Post partum haemorrhage	2 cases.
Accidental Haemorrhage	2 cases.
Caesarean section, (bronchitis)	1 case.
Eclampsia	2 cases.
Shock (obstetrical)	1 case.
Beri-beri.	1 case.
Pneumonia	1 case.

The Caesarean section case that died was suffering from general oedema, and bronchitis which largely contributed to her death. The case of Beri-beri, and the case of pneumonia, could hardly be regarded as deaths strictly attributable to childbirth.

Nine of the deaths occurred at the Government Civil Hospital, two at the Tsan Yuk. Both of these hospitals are under Government, and the cases are treated in both by the Staff of the University Obstetrical Department, yet they frequently show a marked difference both in the morbidity and mortality rates. This seems to be due to a tendency which undoubtedly exists, for more serious cases to go to the Maternity Bungalow of the Civil Hospital, which is much the older building, and is probably better known among the poorer classes as the best place for "urgent cases".

HYDATIDIFORM MOLE.

There is a general opinion that this condition is more common in South China than in Europe, but it is very difficult to be certain on this point. Some years we have seen quite a few cases, and in others only one or two, and it is not easy to say whether patients suffering from this condition generally seek admission to hospital or not. If we may judge from the relatively few admissions for abortion and miscarriage, i.e. 32 out of 2,408 Admissions, compared with 138 out of 3,173 Admissions at the Rotunda Hospital, Dublin in 1934, we are led to think that many cases of haemorrhage in the early months of pregnancy may receive little if any hospital treatment, and consequently escape recognition, and diagnosis.

We have treated most of our cases by the insertion of sea tangle tents into the cervical canal. Labour usually sets in within a reasonable period of time, but if not it is usually a simple matter to extract the mole through the dilated cervix. If the uterus empties itself, (either after the insertion of tents or not) there is not at all the same risk of haemorrhage as when the mole is extracted. When the uterus is much above the level of the umbilicus, and the cervix undilated, we have found that not only was extraction difficult, but was liable to be attended with brisk haemorrhage.

GYNAECOLOGICAL DEPARTMENT.

The total admissions to the Gynaecological wards was 354, of these 195 patients were operated upon. Although these hospitals are not only fed by their own Out-patient Departments (i.e. two per week at the Civil Hospital, and 1 per week at the Tsan Yuk) and also by about half a dozen women's Out-patient Dispensaries in different parts of the Colony, (conducted by Government Lady Medical Officers),—the total number of patients who come to hospital after being recommended to do so is small. During the year there was one death from septic pneumonia.

HYSTERECTOMY.

The subtotal was performed 5 times for cases of Uterine Fibroid.

The largest tumour was the size of a six months' pregnancy, there was also one tumour the size of a 5 months' pregnancy, and one the size of a cocoanut.

OVARIOTOMY.

(Including removal of parovarian cysts)

This operation was performed on 22 occasions during the year, 8 of these were at the Tsan Yuk, and 14 at the Civil Hospital. We will

consider the Tsan Yuk cases first.—Two of the cases were malignant, in one the tumour was small, and it was possible to make an apparently clean sweep, in the other there was a mass at the base of the tumour which rendered the case hopeless. The largest tumour encountered exceeded the size of a full term pregnancy, and when tapped 320 ozs. of mucous fluid were removed. The tumour was very adherent and required to be tapped in two places before it could be drawn up into the wound. (If a very large cyst is adherent we have found that the collapse of its walls facilitates its removal, this does not necessarily hold good with a smaller tumour.) There were also two cases in which the cyst was the size of a full term pregnancy, both of which required to be tapped before removal. One patient who was four months' pregnant was discovered to have a cyst the size of a foetal head, at operation the pedicle was found to be twisted and the cyst congested. In another case, at operation, a small dermoid cyst was found quite free inside the abdomen, its pedicle having divided as a result of torsion, the right tube having been torn across close up to the uterus. The tumour had been free inside the abdomen for some little time, certainly more than a week.

Of the founteen tumours at the Civil Hospital, two were broad ligament cysts, one the size of a foetal head, the other was the size of a six months' pregnancy, and malignant. One tumour was larger than a full term pregnancy, and two were about the same size. All cases recovered from operation.

PROLAPSE.

Thirteen prolapse operations were performed, ten of these were major cases.

EXTRA UTERINE PREGNANCY.

There were six cases during the year, none of which presented urgent symptoms.

RADIUM TREATMENT.

Twenty-two cases of carcinoma of the cervix were treated, and one case of epithelioma of the vulva. In one case of malignant Broad Ligament cyst, radium was applied to the base of the cyst via the abdomen, uterus, and vagina. The immediate result was satisfactory.

MORTALITY.

The one case that died in the Gynaecological wards was admitted 37 weeks pregnant, and suffering from a carbuncle of the right buttock. She died after delivery from septic pneumonia.

ACKNOWLEDGMENT.

In conclusion we wish to express our appreciation of the courtesy of the Director, Deputy Director, and members of the Government Medical Department, including the Principal Matron, Matrons, Sisters and Nurses, and to thank them all for their co-operation. The past and present Assistants, and House Officers have always given valuable help in getting these Reports drawn up, and on this occasion we are relying on the help of Dr. Yang, Senior Assistant to the Department, to see this one through the Press, in Hongkong, where we are sending it.

R. E. TOTTENHAM.

Woodville,
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Londonderry,
Northern Ireland.

May 1934 to April 1935.

STATISTICS OF MATERNITY DEPARTMENT.

Table No. I.

Nature and number of cases treated :—	*T.Y.H.*	*G.C.H.*
Total admissions	1643	765
Total deliveries	1536	715
Multiparae	1060	497
Primiparae	476	218
Presentation :—		
Vertex normal rotation	1419	675
V. 1	1031	430
V. 2	365	225
V. 3	15	13
V. 4	8	7
Vertex face to pubes	14	7
Face	3	1
Breech	43	22
Transverse	2	2
Twins	12	2
Abortion and Miscarriage	30	2
Brow	2	—
Hydatidiform mole	5	3
Haemorrhages :—		
Placenta Praevia	8	2
Post Partum	48	15
Accidental	7	1

Abnormalities :—		
Prolapse of cord	2	4
	T.Y.H.	*G.C.H.*
Prolapse of hand	4	3
Prolapse of ant. vaginal wall	—	1
Hydramnios	—	4
Eclampsia	6	3
Vesicular mole	5	3
Albuminuria :—		
Slight to moderate	108	39
Considerable	6	6
Operations :—		
Suture of perineal lacerations :		
Incomplete	295	138
Multiparae	85	43
Primiparae	210	95
Suture of cervical lacerations	6	5
Forceps	35	25
Destructive Operations on Foetus	2	—
Bipolar version	4	1
Internal version	6	2
External version	—	1
Manual removal of placenta	16	3
Caesarean Section	2	3
Accidental Complications :—		
Cystocele and Rectocele	2	—
Pulmonary tuberculosis	3	—
Diarrhoea	2	4
Meningitis	1	—

	T.Y.H.	*G.C.H.*
Ulceration of vulva	1	—
Nephritis	1	—
Condyloma of urethra	1	—
Scabies	—	1
Dypsnoea	1	—
Vulvitis	1	—
Acute bronchitis	—	1
Morbidity, B.M.A. Standard :—		
Average, one in	19.2	13.2
Percentage	5.2%	7.6%

Mortality :—

Total	9	2
Average, one in	170·7	357·5
Percentage	·58%	·28%
Left hospital against advice	32	15

Table No. II.—*INFANT STATISTICS.*

	T.Y.H.	*G.C.H.*
Total Births	1536	715
Alive	1435	686
Dead :—	101	29
Premature	25	4
Term	24	10
Macerated	17	10
Abortion & Miscarriage	30	2
Hydatidiform mole	5	3
Children born alive who died in hospital	23	16

Abnormalities :—

	T.Y.H.	*G.C.H.*
Hare lip & cleft palate	3	1
Cleft palate	—	1
Anencephalus	1	1
Single hare lip	1	3
Imperforate anus & Urethral orifice	—	1
Foetal ascites	1	—
Monsters	—	1
Supernumerary digits of right hand & foot	—	1

Complications :—

	T.Y.H.	*G.C.H.*
Solid oedema of limbs	1	—
Cerebral haemorrhage	1	—
Umbilical hernia	—	1

Table No. III. *Pelvic Presentation.*

Para	Total	Dead Children	Remarks
T.Y.H.			
Primiparæ.	16	Miscarriage 1	
		Term 2	One case marginal placenta praevia. One case prolapse of cord.
		Macerated 2	
Multiparæ.	27	Miscarriage 2	
		Premature 4	One case malformation of foetus. One case hydrocephalus with extended legs. One case marginal placenta praevia.
		Term 1	Prolapse of cord.
		Macerated 3	
G.C.H.			
Primiparæ.	9	Miscarriage 1	
		Macerated 1	
Multiparæ.	13	Miscarriage 1	
		Premature 1	
		Term 1	
		Macerated 2	

Table No. IV. *Placenta Praevia.*

Name	Age	Para	Period of Pregnancy	Presentation	Variety	Result to Mother	Result to Child	Remarks
T.Y.H. K.K. (526)	35	7	30 weeks	Vertex	Marginal	Recovery	Alive	History of bleeding from vagina 5 days. Os ½ dilated. Edge of placenta felt at left side of os. Membranes intact. Head presenting not fixed. Internal version.
L.Y.Y. (559)	22	2	28 weeks	Vertex	Marginal	Recovery	Dead	Had profuse haemorrhage. Os 2 fingers. Membranes intact. Part of placenta felt on left edge of os. Head presenting, not fixed. Bipolar version performed. Foot brought out after 2nd dose of pit. Body came off. Os only ¼ dilated, head extracted with much difficulty. Cervix torn stitched. Vagina plugged.
I.H. (636)	29	1	Term	Breech	Central	Dead	Dead	Intermittent attacks of bleeding from vagina 4 months. Os dilated to size of a dollar. A hole made in placenta and membranes, foot brought down. Pulse daring manipulation was 140/min. Little difficulty in extracting the after coming head. Vagina plugged. Marked sweating. Pulse became bad. All cardiac stimulants given. Died of shock, haemorrhage, and cardiac failure.
M.K. (751)	22	2	34 weeks	Vertex	Marginal	Recovery	Dead	Bipolar version performed. Traction applied to foot. Head extracted with slight difficulty. Haemorrhage after 3rd stage. Uterus flabby. Cervix slightly torn, stitched. Uterus plugged.
L.K.Y. (871)	26	3	37 weeks	Vertex	Marginal	Recovery	Alive	Os admitting one finger. Part of placenta felt. Head presenting, very high, not fixed. Os admitted 3 fingers. Bipolar version done. P.P.H. Uterus flappy. H.I. Pituitrin 1c.c. and Ernutin .6c.c. Uterus and vagina plugged.

Table No. IV.—*(Continued).* *Placenta Praevia.*

Name	Age	Para	Period of Pregnancy	Presentation	Variety	Result to Mother	Result to Child	Remarks
T.Y.H. Y.M. (1010)	28	5	30 weeks	Breech	Marginal	Recovery	Dead	Patient admitted with feeble pulse rate of 124. Severe bleeding. Os ¾ dilated. Part of placenta obstructing os.
M.F.S. (1531)	20	1	Term	Vertex	Lateral	Recovery	Alive	Edge of placenta felt on the left and posterior part of internal os. Os admitted 3 fingers. Head moderate high but well fixed. Membranes ruptured artificially. Tight binder applied.
L.Y. (1581)	46	14	32 weeks	Vertex	Marginal	Recovery	Dead	Bleeding from vagina for 14 days. Os ¼ dilated. Part of placenta hanging down in the vagina. Head low and fixed. Membranes ruptured. Tight binder applied.
G.C.H. L.H. (284)	32	9	30 weeks	Transverse	Marginal	Recovery	Dead	Transverse presentation with prolapsed hand. Internal version done.
H.K.S. (701)	40	11	34 weeks	Vertex	Marginal	Recovery	Alive	Bleeding 3 months ago. More bleeding on micturition and blood clot came out on micturition. Bipolar version. Foot being brought down. Slight bleeding after 3rd stage.

Table No. V. *Accidental Haemorrhage.*

Name	Age	Para	Period	Variety	Presentation	Result to Mother	Result to Child	Albumin	Remarks
T.Y.H. T.K. (654)	40	10	30 weeks	Concealed	Vertex	Recovery	Dead	—	Admitted in profound shock. Bleeding from vagina followed by fainting attacks. Profuse sweating, cold extremities. Wrist pulse not palpable. Stimulants given. Membranes ruptured. Tight binder applied. Placenta retained and removed manually.
L.S. (1263)	40	8	Term	Revealed	Vertex	Dead	Dead	Trace	Os admitted 3 fingers. Membranes bulging. Head presenting and very high. Membranes artificially ruptured. Tight binder applied. Slight bleeding after 3rd stage. Uterus and vagina plugged. Patients condition poor. Still oozing from vagina. Uterus harder. Patient died at 1.10 p.m. on 10-10-34.
A.K. (1278)	36	6	35 weeks	Revealed	Vertex	Recovery	Dead	—	Bleeding from vagina. No placenta felt. Membranes not bulging. Slight haemorrhage only. No uterine contraction. Membranes artificially ruptured. Tight binder applied. Slight haemorrhage after 3rd stage.
C.H. (1315)	41	10	39 weeks	Concealed	Vertex	Recovery	Dead	Trace	Admitted in profound shock. Bleeding from vagina. Membranes artificially ruptured. Tight binder applied.
Y.P.Y. (208)	34	8	35 weeks	Revealed	Vertex	Dead	Dead	††	Os dilated to size of ½ dollar. Membranes intact. No placenta felt. Bleeding from vagina. Membranes artificially ruptured. P.P.H. Uterus packed. Packing soaked through. Repacked, soaked through again. Hot I.U.D. Patient died at 2.15 p.m. 17-2-35.
L.Y. (253)	32	6	Term	Revealed	Vertex	Recovery	Alive	—	Continuous bleeding. History of severe attack of haemorrhage and fainting at home. Tight binder applied.
C K. (383)	29	3	Term	Revealed	Vertex	Recovery	Alive	†	Patient bleeding profusely. Two finger os. Membranes ruptured. No placenta felt. Sudden attack of severe haemorrhage about 15 minutes. Tight binder applied.
G.C.H. T.O. (518)	27	2	27 weeks	Revealed	Vertex	Recovery	Dead	—	Dead foetus. P.P.H. Vagina plugged. Submammary saline. Owing to an oversight 30% saline infused under both breasts. Temp. rose sharply to 105.8° and in the course of 3 days returned to 100°, with occasional rises to 102° came down to normal on the 16th day. Pulse accompanied temp. rising to 140/min., dropping on 6th day to 110. On the 2nd day, swelling of left breasts with oedema and tenseness of neck dypsnoea, skin of face became tense. Large slough found in left breast, finally cast off, leaving a large cavity size of a closed fist. Sloughing area on right breast only size of 20 cent piece. Most fluid injected into left side.

Table No. VI.

Prolapse & Presentation of Cord.

Name	Age	Para.	Weight of Child	Presentation	Treatment	Result to Mother	Result to Child	Remarks
T.Y.H.								
H.L.S. (1352)	30	5	8 lbs. 4 ozs.	Breech	——	Recovery	Dead	Admitted with cord presenting with feet in vagina. Stillborn baby. P.P.H. Cervix torn posteriorly, stitched.
N.F. (400)	32	7	6 lbs. 4 ozs.	Vertex	—	Recovery	Dead	Membranes ruptured while patient having her bath. Cord appeared at vulva shortly after. Replacement attempted, but failed.
G.C.H.								
W.Y. (19)	28	4	6 lbs. 8 ozs.	Vertex	—	Recovery	Alive	Prolapse of cord seen just before delivery. Artificial respiration given to baby.
C.W.S. (408)	22	1	6 lbs.	Transverse	Internal version	Recovery	Dead	Transverse presentation with prolapse of hand and cord.
F.L.H. (681)	25	3	2 lbs. 4 ozs.	Breech	—	Recovery	Dead	Cord outside vagina, not pulsating. Vague pains. Membranes ruptured. Bleeding per vaginum. Tight binder applied.
S.C.F. (702)	22	2	7 lbs. 8 ozs.	Transverse	External version	Recovery	Alive	P.V. Os 2 fingers.. Membranes intact. External version. Os ½ dilated. Membranes ruptured. A leg brought down, traction applied after cord replaced.

Table No. VII.

Application of Forceps.

Indications	Number of Case		Result to Mother				Result to Child				Remarks	
			Recovery		Dead		Recovery		Dead			
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.
Delayed 2nd stage.	24	21	24	21	—	—	20	19	4	2	One case strong uterine contraction. Four cases weak uterine pains. One case Episiotomy. One case marked oedema of cervical lips.	One case weak uterine contraction. One case contracted pelvis.
P.O.P.	6	3	6	3	—	—	6	3	—	—	One case weak pains, short cord.	—
Eclampsia.	2	—	2	—	—	—	2	—	—	—	—	—
Induction of Labour.	2	—	2	—	—	—	1	—	1	—	—	—
Foetal distress.	1	—	1	—	—	—	1	—	—	—	Large caput succedaneum.	
Uterine Inertia.	—	1	—	1	—	—	—	1	—	—		

Table No. VIII.

Number of Pregnancy of Patients in whom Forceps were applied.

PARA.	**Number of Forceps Cases.**		
	T.Y.H.	*G.C.H.*	*Grand Total.*
1	23	20	43
2	4	3	7
3	1	2	3
4 and over.....	7	—	7
Total	35	25	60

Table No. IX.

Age of Patients in whom Forceps were applied.

AGE.	**Number of Forceps Cases.**		
	T.Y.H.	*G.C.H.*	*Grand Total.*
17-25	18	16	34
26-30	8	6	14
31-35	1	2	3
36 and over	8	1	9
Total	35	25	60

Table No. X.

Destructive Operation on Foetus.

Name	Age	Para	Indication.	Operation.	Remarks.
T.Y.H. C.C. (1431)	41	1	Head on perineum for two hours. Forceps failed.	Craniotomy.	Tear of perineum stitched.
W.Y.M. (1638)	35	3	Hydrocephalus.	Perforation.	Breech with extended legs. Difficult to deliver body and shoulder. When arms out posterior shoulder still in vagina. Perforation. 60 ozs. of fluid withdrawn. Head extracted easily. Weight of foetus and water syringe into head 9lbs.

Table No. XI.

Morbidity, B.M.A. Standard.

	MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER	
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H	G.C.H.
Total Deliveries..	119	56	106	56	133	64	139	66	150	61	142	66	161	67
Cases Morbid.....	8	3	9	5	12	5	11	7	5	8	6	4	4	4

	DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		TOTAL		GRAND TOTAL
	T.Y.H.	G.C.H.	T.Y H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	
Total Deliveries..	148	67	123	66	111	45	114	47	90	54	1536	715	2251
Cases Morbid....	12	2	—	5	3	3	3	1	7	7	80	54	134

	T.Y.H.	G.C.H.	GRAND TOTAL
Total Number of Morbid cases	80	54	134
Total Average Morbidity .. .. one in	19.2	13.2	16.8
Total Percentage Morbidity	5.2%	7.6%	6%

Table No. XII.

Comparative Morbidity in Primiparae & Multiparae.

Primiparae	MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER	
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.
Total Deliveries..	34	17	27	12	31	15	41	24	48	14	34	20	56	19
Cases Morbid.....	4	1	4	—	5	2	6	4	3	2	2	1	2	2

Primiparae	DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		TOTAL		GRAND TOTAL
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	
Total Deliveries.	56	27	42	25	32	9	40	15	35	21	476	218	694
Cases Morbid.....	7	2	—	2	3	1	1	1	4	5	41	23	64

	T.Y.H.	G.C.H.	GRAND TOTAL
Total Average Morbidity .. .. one in	11.6	9.5	10.8
Total Percentage Morbidity	8.6%	10.6%	9.2%

Table No. XII.—*(Continued).*

Comparative Morbidity in Primiparae & Multiparae.

Multiparae	MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER	
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.
Total Deliveries..	85	39	79	44	102	49	98	42	102	47	108	46	105	48
Cases Morbid.....	4	2	5	5	7	3	5	3	2	6	4	3	2	2

Multiparae	DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		TOTAL		GRAND TOTAL
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	
Total Deliveries..	92	40	81	41	79	36	74	32	55	33	1060	497	1557
Cases Morbid.....	5	—	—	3	—	2	2		3	2	39	31	70

	T.Y.H.	G.C.H.	GRAND TOTAL
Total Average Morbidity .. .. one in	27.2	16	22.2
Total Percentage Morbidity	3.6%	6.2%	4.5%

Table No. XIII.

Extra-genital causes of Morbidity.

	T.Y.H.	*G.C.H.*
Pulmonary Tuberculosis	2	—
Diarrhoea	—	3
Meningitis	1	—
Breast abscess	1	—
Vulvitis	1	—
Acute bronchitis	—	1

Table No. XIV.

Caesarean Section.

Name	Age	Para	Date	Nature of Operation	Indication	When Performed	Result to Mother	Result to Child	Remarks
T.Y.H. C.S. (971)	28	2	16-8-34	Classical.	T.B. hip of right side and right leg could not be abducted.	During labour	Recovery	Alive	First delivery also done by Caesarean section. Female baby delivered. Uterus stitched up after removal of placenta. Tubes tied and crushed and buried in broad ligaments.
C.C. (260)	23	1	3-3-35	Lower segment.	Contracted pelvis.	During labour	Recovery	Dead	Neglected brow presentation. Large caput of child which was born dead. Under G.A. flexion of foetal head attempted but failed.

Table No. XIV—*(Continued).*

Caesarean Section.

Name.	Age.	Para.	Date.	Nature of Operation.	Indication.	When performed.	Result to Mother.	Result to Child.	Remarks
G.C.H. C.S. (437)	26	2	16-11-34	Lower Segment Caesarean Section.	Ovarian tumour causing obstruction to labour.	During labour	Recovery	Alive	Tumour in Douglas Pouch removed at the same operation. Full term pregnancy, foetal head over-riding pelvic inlet.
F.T. (447)	25	1	6-12-34	Classical Caesarean section under spinal anaesthesia.	Generally contracted pelvis.	During labour	Dead	Alive	General oedema. Round. worm ova in stool. Bronchitis. Patient died on 14-12-34. Anaemia due to Ascariasis, and Cardiac failure.
L.T.K. (502)	28	2	29-12-34	Lower Segment.	Cicatricial atresia of vagina.	During labour	Recovery	Alive	P.V. failed to identify the cervical canal. Drainage opening closed to posterior fornix blocked. Large Bozeman's catheter gently pushed up. Slightly offensive lochia drained out. Rubber drainage tube put in. One silkworm gut stitch thru the tube and left labium minus.

Table No. XV. *Eclampsia.*

Name	Admission	Age	Para.	Condition on Admission	Urine	Number of Fits			Treatment	Result to Mother	Result to Child	Remarks
						Before Labour	During Labour	After Labour				
T.Y.H. L.H. (1174)	21-9-34	21	1	Had one fit.	† †	3	—	—	H.I. Morphia gr. ½. Atropine gr. 1/100. Intended to perform rectal wash out, but the head was in the way. Os fully dilated. Forceps applied.	Recovery	Alive	Had 2 fits at home. Patient unconscious after the fit on admission.
Y.C. (1203)	28-9-34	27	3	Normal	†	—	—	8	H.I. Morphia gr. ½. Atropine gr. 1/100. Rectal wash out with Sod. Bicarb. Mist Alba 4 oz. per rectum. Ether 1½ oz. per rectum. H.I. Scopolamine gr. 1/100. Stomach wash-tried but failed. Ether given open-method.	Recovery	Alive	Normal delivery.
C.F (1241)	5-10-34	22	1	Marked oedema of legs and abdominal wall.	†	2	—	—	High enema given. Mist. Alba 3 oz. by mouth. Bowels opened about 20 times. Fit started. Morphia gr. ½, Atropine gr. 1/100. Patient recovered. Scopolamine gr. 1/200. Rectal wash out. Os dilated to 50-ct. piece. 2nd fit occurred. No recovery. Patient comatose. Pulse feeble. Died at 11.15 p.m. on 5-10-34.	Dead	—	Patient died before labour. Cause of death:— Eclampsia, toxaemia and cardiac failure.
C.C. (1206)	16-10-34	24	1	Normal.	† †	6	—	2	Morphia gr. ½. Atropine gr. 1/100. Rectal wash out. Rectal ether 1½ oz. ½ Paraldehyde 1 dr. not retained. Mist Alba 2 oz. per rectum not retained. Scopolamine gr. 1/200. Mist Alba 4 oz. by mouth, vomited out. Stomach tube tried, withdrawn. Rectal ether and paraldehyde. Mag. sulph 1½ oz. by mouth. Breast infusion. Ether given by open-method.	Recovery	Alive	Had 2 fits before admission.

Table No. XV.—*(Continued 1)* *Eclampsia.*

Name	Admission	Age	Para.	Condition on Admission	Urine	Number of Fits			Treatment	Result to Mother	Result to Child	Remarks
						Before Labour	During Labour	After Labour				
T.Y.H.												
S.K.H. (362)	30-3-35	18	1	Had 3 fits before admission.	††	18	—	—	Morphia gr. 1/6. Rectal washout. Mist Alba 2oz. left in rectum, and 4oz. orally. Rectal ether 2oz. (not retained) Scopolamine gr. 1/150. Stomach washout. Mist Alba 4oz. left in. Breast infusion of Sod. Bicarb. Scopolamine gr. 1/150. Stomach wash out. Castor oil 3oz. put in. Morphia gr. 1/6.	Recovery	Alive	Forceps delivery.
H.M.K. (463)	28-4-35	22	1	Oedema of legs for one month. Deep Coma. Respiration 8/min. Pulse 120.	††††	2	—	—	Rectal washout 4oz. of Mist Alba left in rectum. Breathing stopped twice, but patient resuscitated both times by artificial respiration. O_2 inhalation given. Camphor gr. 1½ Adrenalin 1 mx.	Dead	—	Patient died before labour at 7.30 p.m. 28-4-35. Cause of death:— Eclampsia Respiratory failure.

Table No. XV.—*(Continued 2)* *Eclampsia.*

Name	Admission	Age	Para.	Condition on Admission	Urine	Number of Fits			Treatment	Result to Mother	Result to Child	Remarks
						Before Labour	During Labour	After Labour				
G.C.H.												
L.S. (4)	3-5-34	32	2	Normal.	++	—	—	1	Oil ether 2oz. by rectum. Rectal washout. Mist Alba 3oz. given per rectum. H.I. Morphia gr. ¼. Atropine gr. 1/150. Next day Morphia gr. ¼. Digitalin gr. 1/100 with Strychnine gr. 1/60. Morphia gr. 1/6. Digitalin gr. 1/100 with strychnine gr. 1/100.	Recovery	Dead	Patient gained consciousness soon after the fit.
P.K. (181)	2-8-34	26	2	Oedema of legs for 1½ months.	++++	—	—	1	Morphia gr. ¼. Rectal washout. Mist Alba 4oz. orally. Catheterized urine 4oz. Rectal washout Mist Pot. Cit. Zss. Antiphlogistin to back. Liquid Ergot 1 dr. Treatment repeated for 5 days.	Recovery	Alive	Had one fit after delivery.
C.C.S. (274)	15-9-34	32	3	Semiconscious	++++	2	—	—	H.I. Morphia gr. ¼. Rectal washout. Mist B.B. 2oz. left in rectum. Stomach washout. Mist B.B. 4oz. left in stomach.	Recovery	Alive	Normal delivery.

Table No. XVI. *Operative Cases Showing Morbidity.*

Nature of Operation	Number		No. of Morbidity		Percentage		Average		Remarks	
	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.	T.Y.H.	G.C.H.
Forceps.	35	25	9	5	25.7%	20%	1 in 3.9	1 in 5	One case short cord and weak pains. Eight cases delayed 2nd stage.	One case weak uterine contraction. Four cases delayed 2nd stage.
Perineal laceration.	295	138	23	12	7.8%	8.7%	1 in 12.8	1 in 11.5	—	—
Cervical laceration.	6	5	1	2	16.6%	40%	1 in 6	1 in 2.5	—	—
Manual Removal of Placenta.	16	3	7	—	43.8%	—	1 in 2.3	—	One case profound shock and accidental haemorrhage, Retained Placenta. One case accidental haemorrhage.	—
Eclampsia.	6	3	1	—	16.6%	—	1 in 6	—	—	—

Table No. XVII.

Duration of Stay in Hospital of Morbid Cases.

	T.Y.H.	*G.C.H.*
Less than 10 days	47	36
10 to 19 days	31	15
20 to 29 days	2	2
Over 29 days	—	1
Total :—	80	54

Table No. XVIII.

Duration of Temperature.

	T.Y.H.	*G.C.H.*
Less than 5 days	65	43
5 to 9 days	14	8
10 to 19 days	1	3
Total :—	80	54

Table No. XIX.

Highest Temperature Charted.

	T.Y.H.	*G.C.H.*
100° to 100.9°	22	12
101° to 101.9°	36	16
102° to 102.9°	10	15
103° to 103.9°	8	6
104° and over	4	5
Total :—	80	54

Table No. XX. *Mortality.*

Name	Age	Para	Admitted	Delivered	Died	Cause of Death	Remarks
T.Y.H. I.H. (636)	29	1	27-5-34	28-5-34	28-5-34	Central placenta praevia. Haemorrhage, shock, and cardiac failure.	Intermittent attacks of bleeding from vagina 4 months. Os dilated to size of a dollar, placenta sitting on top. Bipolar version. Pulse during manipulation 140/min. Marked sweating.
C.S. (677)	27	1	9-6-34	9-6-34	9-6-34	Atonic post partum haemorrhage. Cardiac failure.	P.P.H. Retained placenta. Manual removal. Uterus plugged.
L.Y. (1132)	23	3	15-9-34	15-9-34	19-9-34	Post-partum beriberi. Myocarditis and cardiac failure.	Oedema of face, abdomen, lower limbs. Marked epigastric pulsation. Systolic thrill over pulmonary area. On auscultation presystolic murmur in mitral area 2nd sound accentuated, 1st sound weakened. General condition bad.
C.F. (1241)	22	1	5-10-34	—	5-10-34	Eclampsia, toxaemia, and cardiac failure.	Marked oedema of legs and abdominal wall. Os dilated to 50-ct. piece. 2nd fit occurred. Patient had no recovery from that fit. Comatose, pulse feeble, died before labour.
L.S. (1263)	40	8	10-10-34	10-10-34	10-10-34	Toxaemia of pregnancy. Revealed accidental haemorrhage. Cardiac failure.	Bleeding from vagina. Os admitted 3 fingers. Membranes bulging, head presenting and very high. Membranes artificially ruptured. Tight binder applied. Uterus flabby. Uterus and vagina plugged. Condition poor.

Table No. XX.—*(Continued).* *Mortality.*

Name	Age	Para	Admitted	Delivered	Died	Cause of Death	Remarks
T.Y.H. M.S.M. (1655)	39	10	22-12-34	22-12-34	23-12-34	Atonic post-partum haemorrhage. Car- failure.	P.P.H. Retained placenta, manual removal. Uterus plugged, still oozing from vagina. Complaining of fainting. Uterine plug removed and vagina plugged. Limbs wrapped with cotton wool. Uterus still flabby. Patient developed restlessness.
Y.Y.T. (207)	36	10	16-2-35	—	17-2-35	Obstetrical shock. Cardiac failure.	Under G.A. rotation of head and shoulders. Internal version, forceps tried, but failed. Patient died before labour.
Y.P.Y. (208)	34	8	17-2-35	17-2-35	17-2-35	Revealed accidental haemorrhage. A- tonic post-partum haemorrhage. Car- diac failure.	Os dilated to size of a half-dollar. Membranes intact. No. placenta felt. Membranes artificially ruptured. P.P.H. Uterus packed. Packing soaked through. Repacked, soaked through again. Packing taken out. Hot I.U.D. Exploration with flushing curette, nothing came out.
H.M.K. (463)	22	1	28-4-35	—	28-4-35	Eclampsia Respira- tory failure.	Admitted in deep coma. Respiration 8/mm. Pulse 120. Patient died before labour.
G.C.H. F.T. (447)	25	1	1-12-34	6-12-34	14-12-34	Ascariasis Cardiac failure.	General oedema-Bronchitis-Caesarean Section under Spinal anaesthesia. Round worm in stool.
K.N. (650)	26	2	20-3-35	20-3-35	22-3-35	Lobar pneumonia. Heart failure.	Small scratch between Labia majora and minora at pubic end. General oedema. Marked pallor. Impaired vision. Not felt well for a month. Cough. Infant's head born before admission to Labour Ward.

Table No. XXI.

Induction of Labour.

	T.Y.H.	*G.C.H.*
Total number of cases	4	2
No. of cases successful	3	2

Table No. XXII.

Duration of Stay in Hospital.

	T.Y.H.	*G.C.H.*
Total Number	1536	715
Less than 3 days	10	—
3 to 5 days	6	4
6 to 8 days	1370	622
9 or more days	150	89

STATISTICS OF GYNAECOLOGICAL DEPARTMENT.

1934-1935.

Table No. I.

	T.Y.H.	*G.C.H.*
Number of admissions	223	131
Number of operations	103	92

Table No. II.

Nature & Number of Operations.

	T.Y.H.	*G.C.H.*
Vulva :—		
Epithelioma of vulva	1	—
Perineum :—		
Perinaeorrhaphy	2	—
Plastic operation	1	—
Urethra :—		
Plastic operation	—	1
Vagina :—		
Vesico-vaginal fistula	1	3
Recto-vaginal fistula	—	1
Uterus :—		
Curettage	54	35
C. & D. pessary inserted	5	1
Prolapse	7	6
Ventro-suspension	2	—
Ventro-suspension Miliary T.B.	—	1
Hysterectomy (Subtotal)	—	5
Myomectomy	3	3
Alexander Adam's	1	—

Cervix :—		
Polypus, removal of	4	1
Amputation	2	1
Erosion	—	3
Tubes & Ovaries :—		
Ovariotomy	7	12
Pyosalpinx	2	1
Hydrosalpinx	4	2
Salpingostomy	—	3
Papillary cyst	—	1
Extrauterine gestation	4	2
Broad ligament cyst	1	2
Dermoid cyst	1	—
Ovarian dermoid	—	1
Miscellaneous :—		
Exploratory Laparotomy	1	1
Labial abscess	—	1
Breast abscess	—	1
Vesicular mole, curettage for	—	2
Acute mastitis	—	1
Caesarean section	—	1
Total :—	103	92

Table No. III.

Nature and Number of Cases Treated Without Operation.

	T.Y.H.	*G.C.H.*
Refused operation	21	1
No operation indicated	1	6
Pregnancy with gastritis	1	—
„ „ constipation	1	—
„ „ pneumonia	1	—
„ „ Vomiting	—	1
Normal pregnancy	1	—
Early pregnancy	1	—
Pregnancy with Leucorrhoea	1	—
„ „ Hepatitis	1	—
Enlarged spleen	1	—
Vulvitis	1	—
Acute anteflexed uterus	1	—
Unresolved pneumonia	1	—
Carcinoma of cervix	11	10
Post radium colitis	1	—
Intracervical carcinoma	1	—

Recto-vaginal adeno-carcinoma	1	—
Threatened Miscarriage	2	2
,, Abortion	2	—
Incomplete ,,	4	—
Papilliferous cystadenoma	—	1
Uterine fibroid	4	—
Contracted pelvis with pregnancy	1	—
Retroverted gravid uterus	1	1
Hyperemesis gravidarum	—	1
Sterility	—	1
Peritonitis	—	2
Femoral hernia	1	—
Endometritis	3	—
Chronic inflammation	1	—
Metrorrhagia	1	—
Puerperal Sepsis	—	2
Retroversion	6	2
Retroversion & Salpingitis	1	—
Salpingitis	6	4
Salpingitis & Malaria	—	1
Gonorrhoea	2	—
Cystitis	2	—
Condyloma	1	—
Post partum anaemia	1	—
Tampon treatment	26	2
Puerperal insanity	1	—
Intestinal obstruction	1	—
Pessary inserted	2	—
Dilating urethra	1	—
Septic abdominal wound	1	—
Procidentia	1	—
Procidentia & Ulceration of cervix	—	1
Pelvic inflammation	—	1
Urethral vaginal fistula	1	—
Total :—	120	39

	T.Y.H.	*G.C.H.*
Mortality	1	—

Causes of death :— Septic Pneumonia
Cardiac failure

Table No. IV.

Hysterectomy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
26	**G.C.H.** C.K.	1-5-34	45	Uterine Fibroid.	Subtotal hysterectomy Oöphorectomy.	Recovery	Tumour size of 6 months pregnancy. Bladder accidently opened into, closed, and bladder drained for 10 days.
50	L.Y.	25-6-34	53	Uterine fibroid.	Subtotal hysterectomy.	Recovery	Tumour size of cocoanut. Weight = 5 lbs.
80	Y.H.	18-9-34	47	Uterine fibroid.	Subtotal hysterectomy.	Recovery	Uterus enlarged to size of a fist.
96	Y.H.	23-10-34	40	Uterine Fibroid.	Subtotal hysterectomy. Removed of both ovaries.	Recovery	
98	W.S.	6-11-34	35	Uterine Fibroid.	Subtotal hysterectomy. Ovaries left behind.	Recovery	Hard median tumour size of 5 months' pregnancy.

Table No. V.

Ovariotomy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
19	**T.Y.H.** W.Y.	26-6-34	48	Papilliferous ovarian cyst.	Ovariotomy.	Recovery	Tumour size of fist. Omentum adherent to Douglas Pouch over indurated mass size of pigeon's egg. Omentum ligatured. Deposits found reseeted.
56	C.K.	23-8-34	21	Ovarian cyst.	Ovariotomy.	Recovery	Cyst size of large full term pregnancy. Pedicle clamped from right side, tumour delivered from below. Upper pole adherent to omentum. Cyst tapped. 20 pints of chocolate coloured fluid evacuated.
68	C.P.C.	6-9-34	26	Broad ligament cyst.	Cyst shelled out.	Recovery	Cyst size of foetal head. Uterus normal in position.
74	W.W.C.	6-9-34	24	Ovarian Carcinoma (malignant).	Ovariotomy.	Recovery	Soft growth roofed over broad ligament size of football. Attempting to deliver tumour it fell to pieces found rising from left ovary. Bed of tumour sewn over to stop excessive bleeding. No attempt made to remove tumour at base owing to profuse haemorrhage.
75	L.K.C.	13-9-34	20	Twisted ovarian cyst. Normal Pregnancy.	Ovariotomy.	Recovery	Uterus 4 months' pregnant. Right ovarian cyst size of small foetal head twisted and congested. Omentum adherent to pedicle, clamped and separated.

Table No. V.—*(Continued 1)*

Ovariotomy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
159	**T.Y.H.** N.Y.	7-3-35	37	Ovarian cyst.	Double ovariotomy. Ventral suspension.	Recovery	Small dermoid cyst size of tennis ball, floating freely in abdominal cavity. Right ovary elongated and cystic size of a sausage. Cyst removed. Left tube ampulated closed to uterus.
196	L.Y.	25-4-35	36	Ovarian cyst.	Ovariotomy.	Recovery	Large left ovarian cyst size of full term pregnancy. Adherent to omentum. Small cyst of right ovary removed. Large cyst removed after tapping. Fluid tapped — 1½ gallons.
198	W.M.Y.	27-4-35	50	Left ovarian cyst.	Ovariotomy.	Recovery	Tense swelling size of over term pregnancy, very adherent. Tumour multilocular. Cyst tapped, lower half of tumour freed and resected. Upper half also tapped adhesion to omentum freed. Rest of tumour removed. Cyst contained 320 ozs. of mucus and fluid. In some loculi fluid blood stained.

Table No. V.—*(Continued 2)*

Ovariotomy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
34	**G.C.H.** C.S.	29-5-34	34	Ovarian cyst.	Ovariotomy.	Recovery	Cyst size of 7 months' pregnancy. Cyst could not be emptied owing to small size of canula. 4½ pints of muco-ropy fluid drained out.
42	C.J.S.	19-6-34	32	Ovarian tumour.	Ovariotomy.	Recovery	Ruptured left ovarian cyst, semisolid about size of football. Free straw coloured fluid about 5 pints evacuated.
57	L.S.	17-7-34	42	Ovarian cyst.	Ovariotomy.	Recovery	Swelling size of over term pregnancy filling up abdomen. 20 pints greenish tinge clear fluid evacuated.
64	L.H.	24-7-34	33	Ovarian cyst.	Ovariotomy.	Recovery	Cyst size of foetal head. Partial resection of right ovary.
68	C.W.H.	14-8-34	36	Ovarian cyst.	Ovariotomy.	Recovery	Tumour adherent to abdominal wall and omentum. Cyst tapped chocolate fluid 6 pints drained out.
73	W.M.Y.	21-8-34	20	Ovarian cyst.	Ovariotomy.	Recovery	Tumour size of full term pregnancy. Free fluid in peritoneal cavity. Cyst tapped. 80 ozs. drained out. Free fluid 40 ozs. Weight of cyst 15 lbs.
87	Y.A.L.	25-9-34	41	Ovarian cyst.	Ovariotomy.	Recovery	Free fluid in peritoneal cavity. Adherent in front to peritoneum. Cyst tapped, mucous fluid 4 pints evacuated. Sac weighed 1 lb. Cyst before tapping size of full term pregnancy. Right ovary also cystic size of a kidney.

Table No. V.—*(Continued 3)*

Ovariotomy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
88	**G.C.H.** T.C.	2-10-34	36	Ovarian cyst.	Ovariotomy.	Recovery	Cyst size of football. Adherent to peritoneum and omentum. Cyst removed without tapping. Weight of cyst 6½ lbs.
110	W.P.N.	4-12-34	39	Broad ligament cyst.	Cyst shelled out.	Recovery	Cyst size of foetal head, ruptured bed buried with redundant tissue. Ovaries not palpable.
123	L.A.Y.	15-1-35	50	Broad ligament cyst.	Marsupialization of cyst. Radium therapy.	Recovery	Size of 6 months' pregnancy, appearing to be malignant.
143	C.P.	12-3-35	30	Ovarian cyst. Uterine fibroid.	Double ovariotomy. Salpingectomy. Myomectomy.	Recovery	Myoma size of hazel nut on anterior surface. Right small ovarian tumour size of small mango. Left tumour size of mandarin orange. Both tumours removed, both tubes closed.
155	L.K.H.	2-4-35	30	Ovarian cyst.	Ovariotomy. Myomectomy.	Recovery	Cyst impacted in pelvis, size of 4 months' pregnancy. Small myoma size of ping pong ball from anterior surface of utero-cervical junction.
159	C.S.Y.	16-4-35	24	Ovarian cyst.	Ovariotomy.	Recovery	Cyst size of American orange chocolate cyst at anterior surface of broad ligament. Two uteri, right uterus has 2 tubes, left uterus has one.
161	L.T.	24-4-35	43	Ovarian cyst.	Ovariotomy.	Recovery	Cyst size of full term pregnancy. Peritoneum and intestines studded with tubercles. Free fluid in abdomen, clear and straw colour.

Table No. VI. *Operations on Uterus, Tubes, & Ovaries.*

No.	Name	Date	Age	Disease	Operation	Result	Remarks
280	**T.Y.H.** L.S.	10-5-34	33	Hydrosalpinx	Adhesions separated. Left thickened tube and ovary removed. Uterus Suspended.	Recovery.	Uterus retroverted and adherent to Douglas' Pouch. Right hydrosalpinx size of hen's egg adherent to appendix.
10	K.K.	28-6-34	26	Fixed retroversion.	Left ovarian cyst partly excised. Ventral suspension.	Recovery.	Cyst size of ping pong ball. Left tube blocked.
26	C.H.	19-7-34	40	Hydrosalpinx and Ovarian cyst.	Hydrosalpinx of left side excised. Ovariotomy. No suspension done.	Recovery.	Left cyst size of fist excised. Tumour of right side between two layers of broad ligament ruptured and turned out to be a chocolate cyst size of fist. Uterus enlarged and retroverted.
38	T.L.Y.	26-7-34	24	Pyosalpinx with left Broad ligament cyst.	Tumour contained pus. No attempt made to remove the cyst. Both cyst cavities and pus tube drained through posterior fornix. Rubber tubings inserted.	Recovery.	Tumour size of two fists. Cyst tapped, free straw coloured fluid aspirated. On separating the sac another locular opened which contained pus. D.P. drained through vagina with gauze roll.
82	W.C.	27-9-34	39	Hydrosalpinx.	Left hydrosalpinx and Right cystic ovary partly excised. Uterus suspended.	Recovery.	Hydrosalpinx size of a foetal head.

Table No. VI.—*(Continued 1) Operations on Uterus, Tubes, & Ovaries.*

No.	Name	Date	Age	Disease	Operation	Result	Remarks
83	**T.Y.H.** L.Y.	27-9-34	26	Hydrosalpinx.	Left hydrosalpinx excised with ovary. Right hydrosalpinx also excised. Uterus suspended.	Recovery	Both hydrosalpinx size of a fist.
94	H.Y.	11-10-34	25	Fixed retroversion.	Ovaries and tubes matted down. Adhesions separated. Cysts ruptured. Uterus suspended.	Recovery	Uterus adherent firmly to Douglas' Pouch. Tubes not found patent.
158	L.L.H.	28-2-35	22	Pyosalpinx.	Right tube ruptured when explored. Abdomen drained through Douglas' Pouch.	Recovery	Right tube distended with pus.

Table No. VI.—*(Continued 2) Operations on Uterus, Tubes, & Ovaries.*

No.	Name	Date	Age	Disease	Operation	Result	Remarks
27	**G.C.H.** N.N.	1-5-34	28	Hydrosalpinx.	Left tumour and cystic ovary excised. Uterus not suspended.	Recovery.	Uterus adherent to bladder with omentum matting over double cystic ovaries.
28	C.Y.C.	1-5-34	25	Fixed retroversion.	Double Salpingostomy.	Recovery.	Right ovary prolapsed and cystic, partly excised. Adhesions freed.
44	L.K.	18-6-34	29	Fixed retroversion.	Salpingostomy.	Recovery.	Adherent to Douglas' pouch. Adhesions separated. Both tubes adherent to ovaries. Right tube patent.
48	P.O.	25-6-34	33	Hydrosalpinx.	Hydrosalpinx excised. Uterus suspended.	Recovery.	Hydrosalpinx of right side size of a goose egg. Adhesions to ovaries freed.
75	L.H.	28-8-34	31	Fixed retroversion.	Right salpingostomy. Uterus suspended.	Recovery.	Serous fluid in peritoneal cavity. Uterus adherent to Douglas' pouch. Left hydrosalpinx and left ovary unhealthy, and cystic, partially excised. Adhesions separated.
111	A.Y.K.Y.	11-12-34	24	Fixed retroversion.	Left tube partly dissected. Left ovary partially dissected. Uterus suspended.	Recovery.	Uterus adherent to Douglas' pouch, adhesions separated.

Table No. VII. *Prolapse.*

No.	Name	Date	Age	Disease	Operation	Result
291	**T.Y.H.** S.P.C.	24-5-34	41	First degree prolapse.	Anterior colporrhaphy. Shortening of Mackenrodts ligaments. Perinaeorrhaphy.	Recovery.
120	L.N.	22-11-34	28	Complete prolapse.	Complete prolapse operation. Vaginal suspension. Perinaeorrhaphy.	Recovery.
155	L.C.H.	7-3-35	28	Second degree prolapse.	Prolapse operation. Vaginal suspension of uterus. Anterior colporrhaphy. Amputation of cervix and Perinaeorrhaphy.	Recovery.
165	T.H.	21-3-35	27	Second degree prolapse.	Prolapse operation. Vaginal suspension of uterus. Anterior colporrhaphy. Amputation of cervix. Perinaeorrhaphy.	Recovery.
166	L.S.M.	14-3-35	31	Second degree prolapse.	Prolapse operation. Vaginal suspension of uterus. Anterior colporrhaphy. Amputation of cervix. Perinaeorrhaphy.	Recovery.
179	C.T.	4-4-35	30	Second degree prolapse.	Vaginal suspension. Anterior colporrhophy. Shortening of Mackenrodt's ligaments. Perinaeorrhaphy.	Recovery.
186	F.L.	11-4-35	29	Second degree prolapse.	Anterior colporrhaphy. Vaginal suspension of uterus. On opening peritoneum a small myoma size of a pea felt about central part of fundus of uterus which was not removed. Perinaeorrhaphy.	Recovery.

Table No. VII.—*(Continued).*

Prolapse.

No.	Name	Date	Age	Disease	Operation	Result
51	**G.C.H.** N.K.	26-7-34	24	Complete prolapse.	Complete prolapse operation with vaginal ventral suspension. Perinaeorrhaphy.	Recovery.
56	W.L.T.	17-7-34	32	Complete prolapse.	Modified prolapse operation. Anterior lip of cervix partly amputated. Perinaeorrhaphy.	Recovery.
94	L.A.Y.	16-10-34	61	Complete prolapse.	Complete prolapse operation.	Recovery.
97	F.S. [redacted]	29-10-34	35	Complete prolapse.	Complete prolapse operation.	Recovery.
102	C.M.	5-11-34	36	First degree prolapse.	Left sided trachelorrhaphy. Shortening of Mackenrodts ligaments. Anterior Colporrhaphy.	Recovery.
156	L.C.	16-4-35	37	First degree prolapse.	Cervix dilated. Anterior Colporrhaphy and Perinaeorrhaphy performed.	Recovery.

Table No. VIII.

Miscellaneous Operations.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
278	**T.Y.H.** C.M.	10-5-34	39	Vesico-vaginal fistula.	With great difficulty fistula opening was teared. Bladder mucous membrane invaginated and sewn over.	Recovery.	Self retaining catheter inserted.
284	P.M.	17-5-34	37	Cervical polypus.	Polypus twisted off with a pair of ovum forceps. Uterus curetted.	Recovery.	—
289	F.K.	17-5-34	47	Cervical polypus.	Polypus twisted off Uterus curetted.	Recovery.	——
59	L.Y.	14-8-34	34	Cervical polypus.	Polypus removed.	Recovery.	D. and C. done.
128	C.C.	1-12-34	32	Dermoid cyst.	Omentum covering tumour separated. tumour excised.	Recovery.	Serous fluid in peritoneal cavity. Tumour undergoing torsion. Small pearl like body size of a pea removed from left ovary. Tumour partly cystic partly semi-solid. Cutting the semi-solid part sebaceous material with hair found.

Table No. VIII.—*(Continued 1)* *Miscellaneous Operations.*

No.	Name	Date	Age	Disease	Operation	Result	Remarks
130	**T.Y.H.** L.W.	4-12-34	30	Cellulitis Chronic inflammation.	Exploratory Laparotomy.	Recovery.	Uterus and right tube densely adherent to peritoneum. On separation pus escaped. Abdomen drained.
131	F.Y.M.	6-12-34	49	Fibroid.	Tumour removed from cervix.	Recovery.	Fibroid size of walnut.
141	T.T.	3-1-35	46	Cervical myoma.	Myoma caught hold of with Musseaux and twisted off from cervix. Cervix dilated, uterus curetted.	Recovery.	Fibroid protruding from cervix size of ping-pong ball.
160	C.Y.	7-3-35	37	Cervical polypus.	Polypus twisted off D. and C. done.	Recovery.	Uterus retroverted and fixed.
178	K.Y.	11-4-35	29	Myoma.	Myomectomy. Double salpingectomy.		Myoma size of a ping pong ball situated at fundus intramurally, resected. Hydrosalpinx on both sides with slight enlargement of ovaries.

Table No. VIII.—*(Continued 2)* *Miscellaneous Operations.*

No.	Name	Date	Age	Disease	Operation	Result	Remarks
35	**G.C.H.** H.Y.C.	28-5-34	49	Fibromyoma.	Myomectomy.	Recovery.	Submucous fibroid size of American orange, removed piecemeal. Uterus curetted and plugged with gauze.
67	Y.C.	31-7-34	37	Recto vaginal fistula.	Fistula track dissected out, invaginated Perinaeorrhaphy.	Recovery.	——
70	H.W.	14-8-34	43	Cervical polypus.	Excision.	Recovery.	Reddish lump with pedicle 1½″ protruding from cervix.
99	C.P.	29-10-34	30	Ovarian dermoid.	Dermoid cyst removed. Ventral suspension.	Recovery.	Cyst size of an orange.
100	L.S.	30-10-34	25	Vesico-vaginal fistula.	Self retaining catheter put in.	Recovery.	Fistula found closed.
104	L.M.C.	20-11-34	21	Vesico-vaginal fistula.	Fistula dissected off. Self retaining catheter inserted.	Recovery.	Vesical mucous membrane stitched transversely and vaginal mucous membrane stitched longitudinally.

Table No. VIII.—*(Continued 3)*

Miscellaneous Operations.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
106	**G.C.H.** C.C.	27-11-34	22	Vesico-vaginal fistula.	Fistula pared off. Self retaining catheter retained.	Recovery.	Vesical m/m stitched longitudinally in continuous stitches. Vaginal m/m stitched in four interrupted stitches transversely.
143	T.C.	19-2-35	48	Fibroid.	Exploratory laparotomy.	Recovery.	Uterus bound down with mass of adhesion involving especially left tube and ovary.
142	Y.K.M.	12-3-35	48	Pedunculated cervical myoma.	The tumour removed. Clamp applied to stalk to stop bleeding. Uterus curetted. Uterus and vaginal packed.	Recovery.	Tumour size of a mandarin orange attached to cervix.
153	Y.K.L.	2-4-35	45	Fibromyoma.	Adhesions separated. Hard mass found between uterus and rectum. Induration appeared to extend through wall of uterus.	Recovery.	Irregular swelling in Douglas' pouch. Body of uterus could not be felt apart from tumour. Intestines adherent to posterior wall of uterus.

Table No. IX.

Extrauterine Pregnancy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
275	**T.Y.H.** F.A.	3-5-34	35	Ruptured Extra-uterine pregnancy.	Left tube and left ovary excised. Bleeding points tied.	Recovery.	Omentum adherent to a mass of pelvic haemotocele size of small football. Blood clot removed.
133	H.C.	13-12-34	29	Ruptured left sided Extrauterine pregnancy.	Extra uterine pregnancy excised. leaving the ovary. Uterus not suspended.	Recovery.	Free dark blood found in abdominal cavity.
152	L.A.L.	31-1-35	25	Extrauterine pregnancy.	Pregnancy removed. Uterus suspended. Implanting of the right ovary into the rectal sheath.	Recovery.	Pregnancy found on right side which ruptured in the broad ligament.
191	L.H.Y.	17-4-35	33	Extrauterine pregnancy.	Right sided extra-pterine pregnancy removed.	Recovery.	Pregnancy size of a cricket ball alherent to omentum.

Table No. IX.—*(Continued).*

Extrauterine Pregnancy.

No.	Name	Date	Age	Disease	Operation	Result	Remarks
93	**G.C.H.** C.W.S.	16-10-34	26	Extrauterine pregnancy.	Omentum separated. Ruptured right tube and cyst with ovary on the right side excised. Uterus not suspended.	Recovery.	Omentum protruding down the tubes in pouch of Douglas. Blood clot evacuated.
130	C.K.	27-1-35	42	Right sided extra-uterine pregnancy.	Tube resected. Small cystic ovary removed.	Recovery.	Pelvis full of blood clots.

Table No. X.

Mortality.

No.	Name	Age	Date	Died	Diagnosis	Remarks
	T.Y.H.					
98	C.Y.H.	17	19-10-34	5-11-34	Carbuncle and Pneumonia with Pregnancy.	37 weeks' pregnancy. Numerous sinuses around central opening of carbuncle. Very offensive discharge. 28-10-34 Normal delivery of a male child. 1-11-34 Carbuncle incised. Patient having hoarseness of voice. Purulent discharge from carbuncle. Patient died of Septic pneumonia and cardiac failure.

TWO FURTHER CASES OF NASO-PHARYNGEAL CARCINOMA SHOWING SIGNS NOT PREVIOUSLY RECORDED IN THE SURGICAL UNIT.

We have such a large number of cases of naso-pharyngeal carcinoma available for observation in Hong Kong that it seems desirable to obtain as far as possible a complete picture of the manifestations of this disease. With this aim in view the following notes have been published.

This communication is with regard to two cases. The first one is put on record because it apparently shows a secondary deposit in the os coxae; the second on account of the widespread involvement of the trigeminal nerve, more widespread than we have previously observed.

The first patient Mr. H— C— F— was seen in consultation with Dr. Valentine. He was a young man of 25 years of age when seen in August 1934. He had then been suffering for one year from lumps in the left side of the neck, and for six months from lumps in the right side. He had lived all his life in Hong Kong and he worked as a clerk in the audit department.

There was a very small doubtful tumour in the naso-pharynx. A gland was removed for section (see diagram 1). This proved to be carcinoma.

There were no other signs.

The cone of light was wanting on the right side and both membranes were slightly opaque in their lower halves, and there had been slight deafness noticed on using the telephone with the left ear. Whispering and conversation however were audible at 20 feet with each ear.

On 17th. September 1934, a course of radium was begun. Four six mgm. needles and two two mgm. needles were introduced into the nasopharynx in rubber catheters. This could only be borne by the patient for 72 hours—though anything from 100 to 150 is our usual dose.

Twelve one mgm. needles and six two mgm. needles were applied on *each* side of the neck at a distance of 1cm. for 287 hours.

The total dosage was

nasopharynx	2016	mgm. hrs.
right side of neck	6888	,, ,,
left side of neck	6888	,, ,,
	15792	,, ,,

The patient has been seen at intervals since. In December 1934, glands reappeared on both sides of the neck. Soon after, and in the same month, he slipped and strained his back and lamed his left leg which struck the ground. He continued walking but severe pain often kept him awake at night.

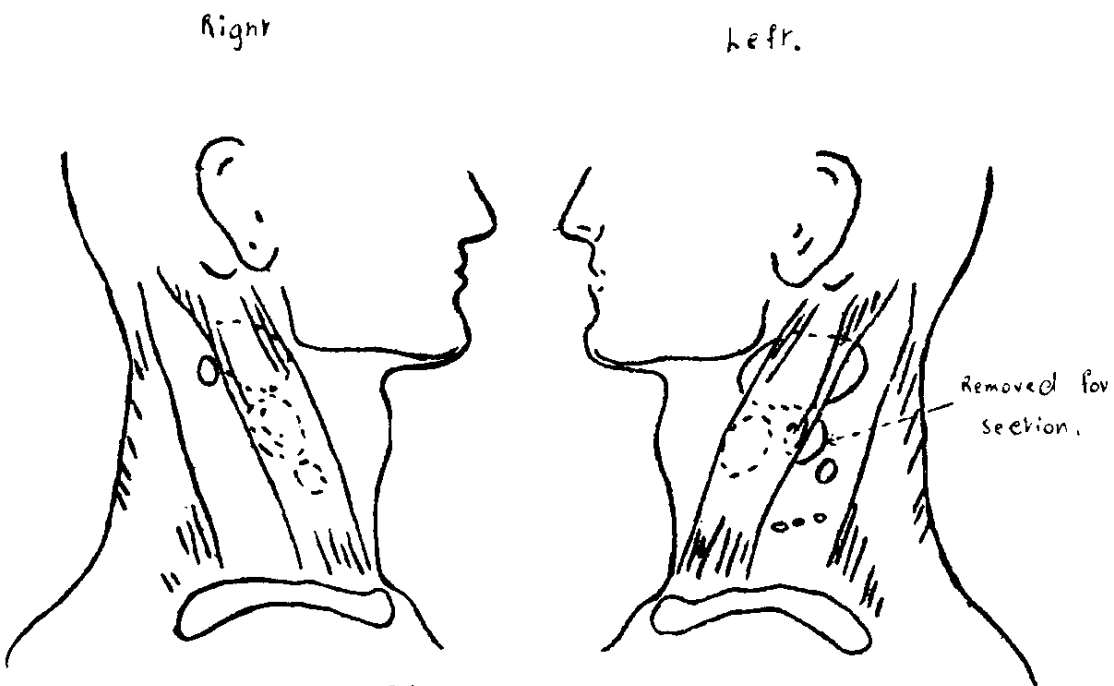
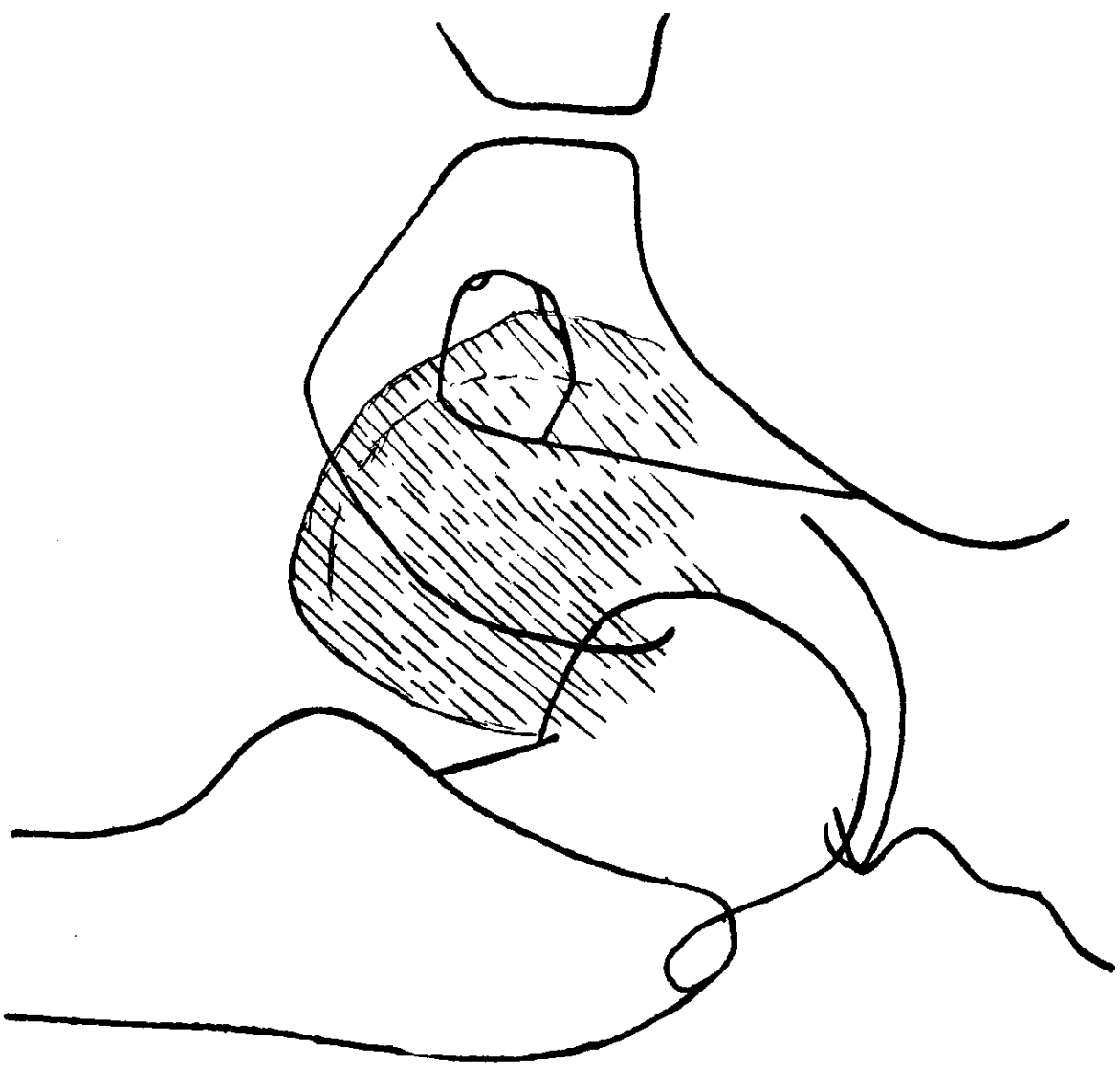
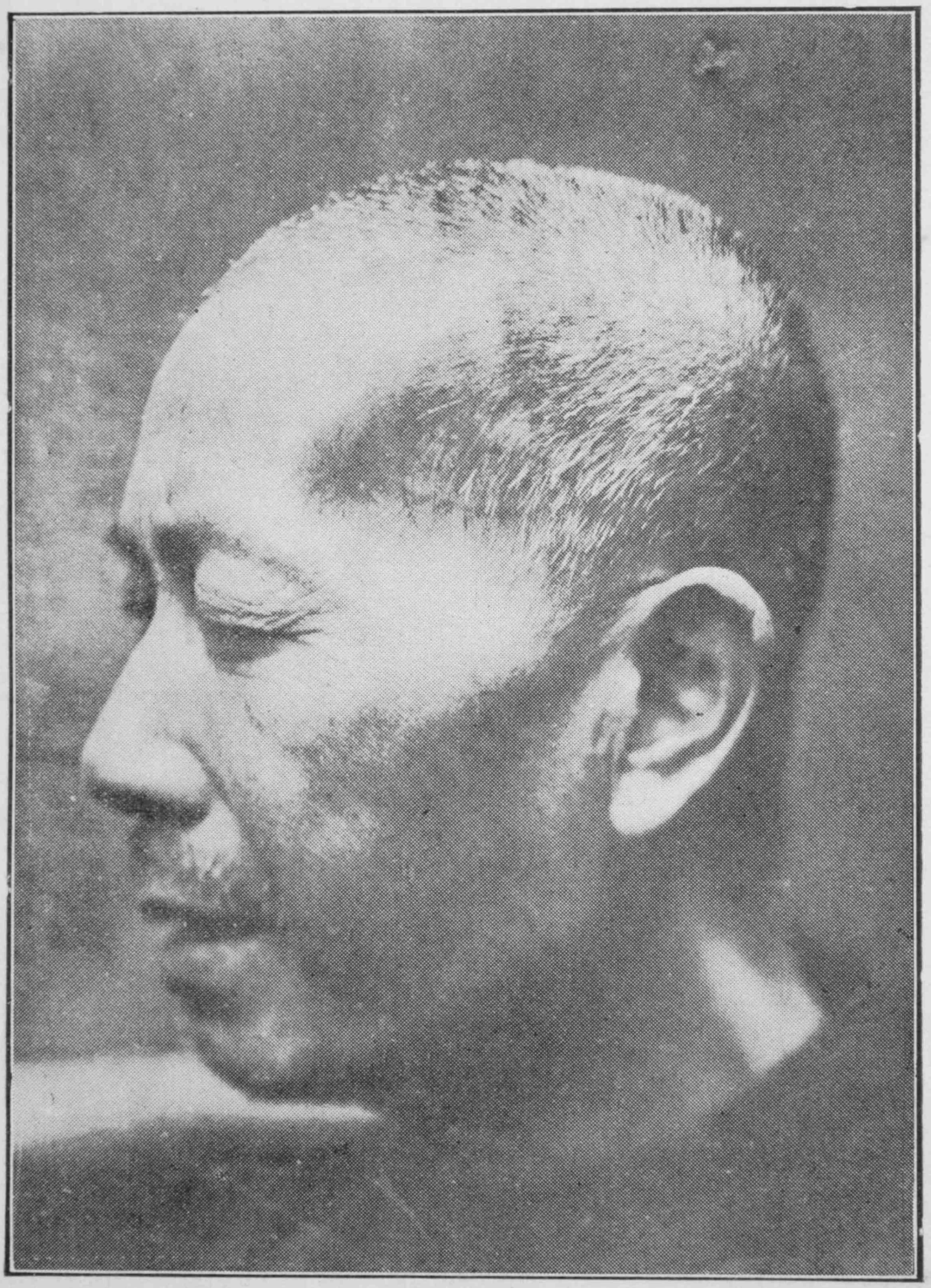


Diagram I.— H— C— F—



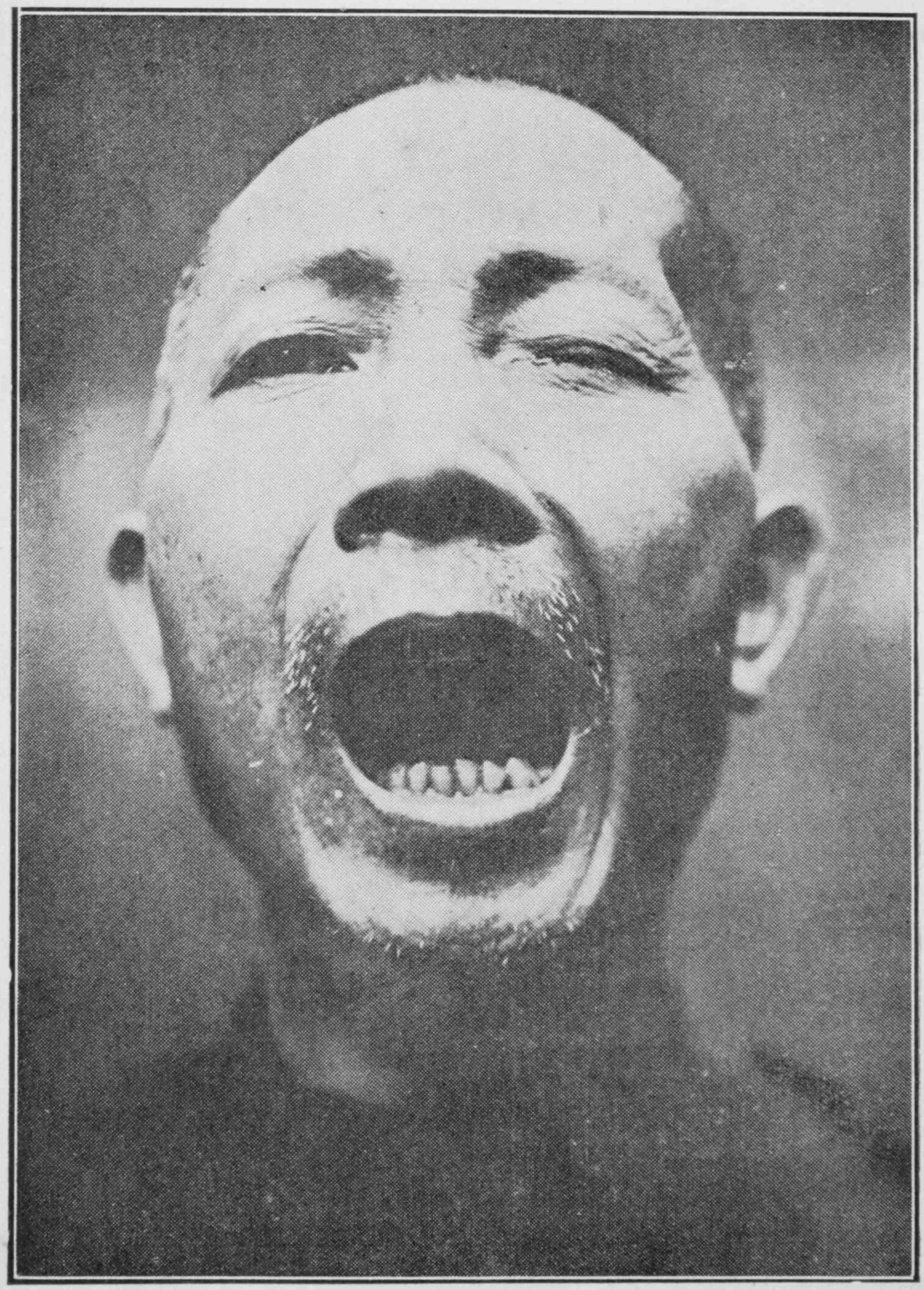
H— C— F—. Metastasis in left pubis.

Diagrammatic tracing of X-ray film showing an endosteal tumour growing from the front of the pelvis.



C— P— L. Trigeminal and Oculo-Motor Paralysis.

Note the wasting of the left temple and flatness over the left masseter muscle. Ptosis is also shown on the left.



C.— P— L—. Trigeminal and Oculo-Motor Paralysia.

Note the deviation of the lower jaw to the left. Also the hollow of the left temple and the left ptosis.

In the first six months of 1935, no nasal nor aural symptoms have developed, but he has gradually lost appetite and weight. He is very pale and the masses on each side of the neck are very large.

There is an irregular softish swelling in the left trigonum femorale. X-ray films show that this is due to an endosteal growth of the pubic part of the left os coxae.

So far secondary deposits of naso-pharyngeal carcinoma have been found in the cervical lymph glands,

axillary „ „
bones of the calvarium,
liver,
soft parts over the scapula,

and described and figured in previous communications.

The second patient C— P— L— is an unemployed Chinese of fifty four years of age who was admitted on 21-6-35 to the Surgical Unit at the Civil Hospital complaining of blockage of the left nostril and deafness of the left ear.

Two years previously after recovering from a trivial cold in the head he had experienced slight difficulty in breathing through the left side of the nose. About the same time the hearing power of his left ear became impaired. These have persisted and slightly increased since. For the last six months there has been pain in the back and sides of the neck. For the last two weeks he had not been able to open his left eye.

On admission the following signs of trigeminal paralysis were observed :— (fig. 2).

1. Superficial and deep sensibility were lost over the entire left half of the face.
2. The skin over the same area had a curious soft silky feel.
3. There was wasting in the left temporal region and in the cheek.
4. On clenching the teeth, neither the left temporal muscle nor the left masseter could be felt to harden.
5. When the patient opened his mouth, the lower jaw deviated to the left side as shown by the relative positions of the upper and lower incisor teeth.

Apart from the trigeminal paralysis, this patient exhibited ptosis of the left upper eyelid and some paralysis of the eyeball that is medial and lateral movements of the cornea were impossible though some upward and downward movement was possible. A slight lateral squaint was present.

Left hemicranial headache especially frontal and to a slighter extent occipital was complained of. There was also pain in the right occipital region.

The presence of a left naso-pharyngeal tumour was evidenced by deviation of the uvula to the right at rest and by this deviation being accentuated when the patient said "ah:"

There was obstruction to breathing through the left side of the nose and excessive discharge of mucus therefrom.

In the right ear conversation was audible at 18 feet, whispering at 10 feet, and bone conduction was better than air conduction. The membrane showed slight retraction.

In the left ear conversation was audible at 12 feet and whispering at 4 feet. Bone conduction was again better than air conduction and also better than bone conduction on the right side. The membrane was opaque.

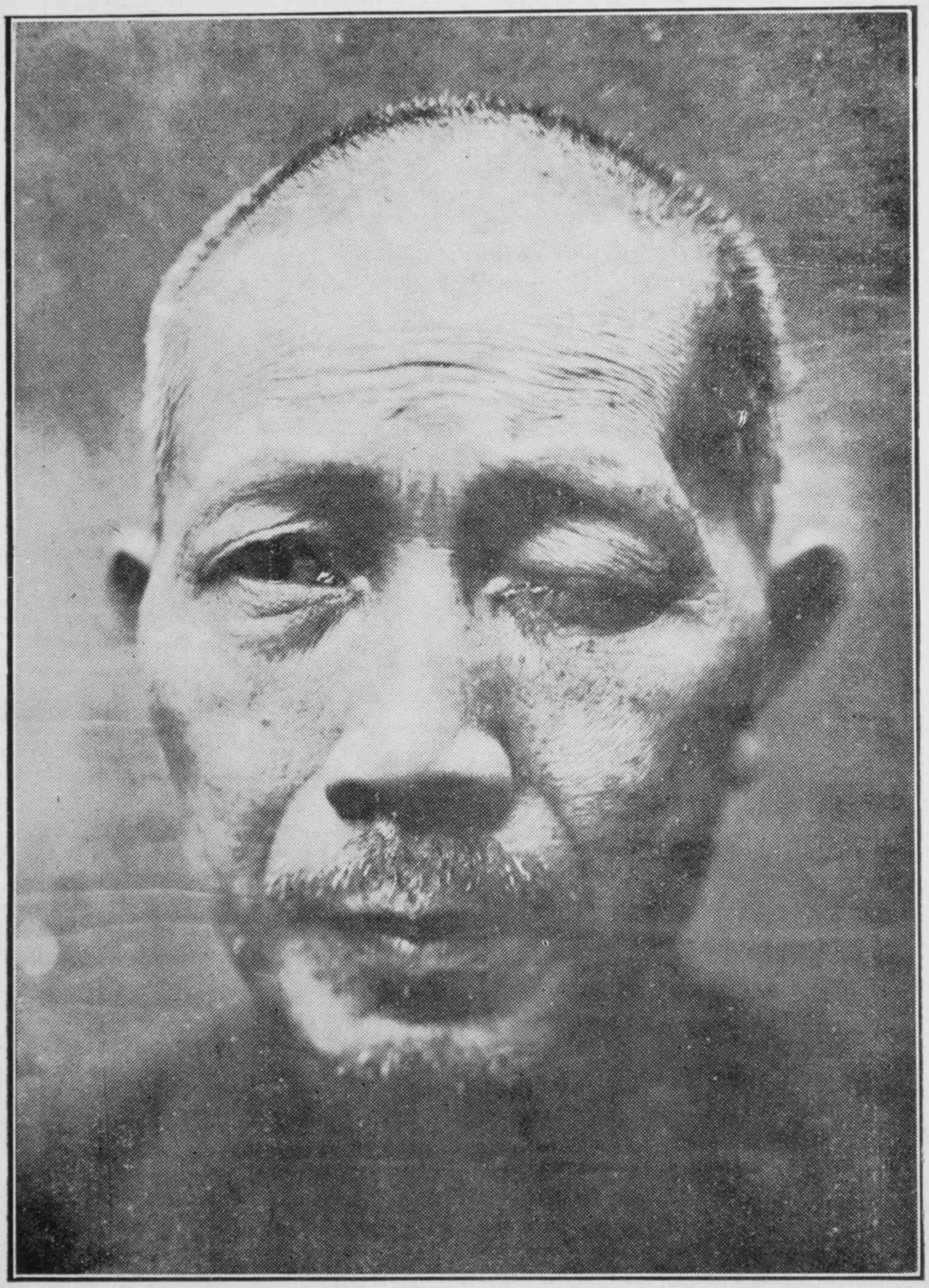
A very small isolated gland was palpable deep to the posterior part of the right sternomastoid above the middle.

REFERENCES:

Digby, Thomas & Hsiu, "Notes on Carcinoma of the Nasopharynx", 1930, Caduceus Vol. 9, No. 2.

Digby, K. H., "Naso-pharyngeal Carcinoma without Clinical Enlargement of Lymphatic Gland in the Neck", 1930, Caduceus, Vol. 9, No. 4.

Digby & Khoo, "Naso-pharyngeal Carcinoma", 1934, Transactions of the Far Eastern Association of Tropical Medicine.



C— P— L—. Trigeminal and Oculo-Motor Paralysis.

Note the hollow of the left temple due to wasting of the temporal muscle. Ptosis is also shown on the left side.

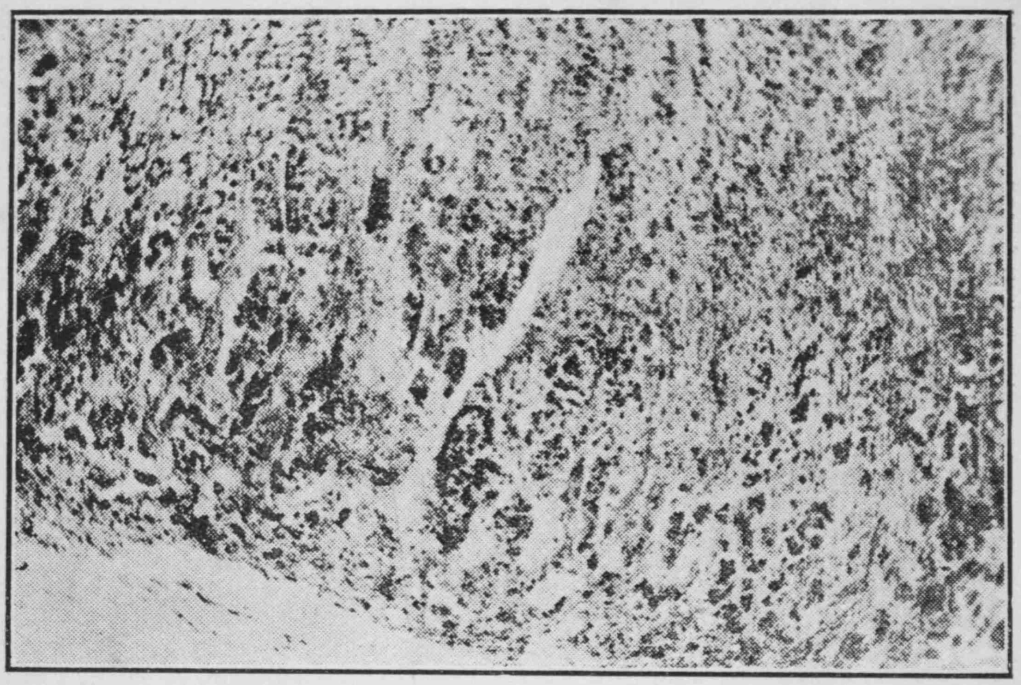


Figure I. Section showing suprareal cortex with interstitial haemorrhages (see article in Caduceus 1935, 14, 222).

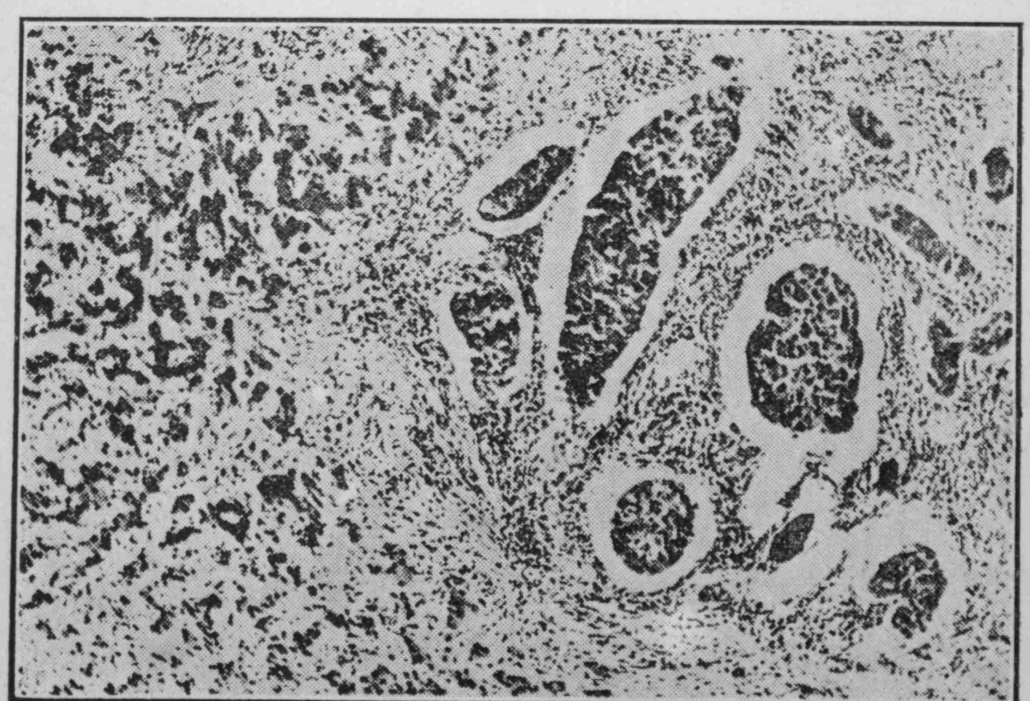


Figure II. Section showing neoplasm invading Liver tissue.

NOTES ON A CASE OF MILIARY TUBERCULOSIS WHICH DEVELOPED TETANY.

K. H. UTTLEY, M.A., M.D., D.T.M. & H.

This patient was a rather thin Chinese girl of 6 years of age, admitted to the hospital one evening with a history of having had a fever with "pains in the bones" a month previously, since when there had been slight feverishness at night.

Four days before admission the mother had noticed that the child could not walk normally, and that she fell after taking a few steps. She was put to bed, and soon became drowsy, developing unusual movements of her arms. There had been no diarrhoea and no vomiting.

On Admission.

Temperature 100.8. Pulse 148. Respirations 26. The child could not be roused, and neither then nor at any time did she utter any sound. Her breath had a faint acetone smell. She lay on her back, with her upper limbs in the positions to be described later.

A catheter specimen of the urine showed the presence of no abnormality.

Lumbar puncture showed the fluid to be under normal pressure, and it was clear in appearance. The report (kindly furnished by Dr. Greaves) stated that the globulin was increased, there were no tubercle bacilli or other organisms present, and that there were a few lymphocytes to be seen.

Central Nervous System.

The child kept her eyes turned to the right most of the time, but she would also look elsewhere, especially after 24 hours, when she ceased to be comatose. There was no strabysmus or ocular incoordination. When examined the next day, she appeared to be able to see things and people normally, but did not take much interest in what was happening. Chvostek's sign was well marked, when the facial nerve was tapped. Deglutition was normal the next day after admission, but the teeth were tightly clenched throughout the illness.

Motor nerves. There was a generalised slight wasting of the muscles. There were no tremors. There were intermittent contractions of the left arm, during which the shoulder joint was abducted, the elbow and wrist joints flexed, the thum drawn across the palm, the metacarpo-phalangeal joints flexed, and the interphalangeal joints extended (Accoucheur's hand). While this was happening, there was an external rotation of the forearm taking place. Trousseau's sign was well marked, (that is, constriction of the arm brought on an increase of the spasm.)

The right arm remained passively in the position in which it was placed for a time, but eventually it was drawn up to the shoulder and maintained in external rotation. There was no abduction across the mid-line. An interesting feature was that if this arm were tested for Trousseau's sign, the spasm was produced only in the opposite limb.

Left Leg. This was held firmly and rigidly extended at the hip, knee and ankle joints, with the foot in a pes cavus position. It underwent no movements but the tonic spasm intermittently passed off. The right leg was not affected. Trousseau's sign was not evoked in either leg.

Sensory Power. The child was too ill to test this.

Reflexes. The plantar response was extensor, and all others could not be evoked.

Kernig's sign was not present.

Trophic changes. The child sweatted freely.

Neck. There was no neck rigidity, but the child objected to having its head and neck manipulated.

Tongue.....clean.

Chest.....Lungs and heart normal.

Abdomen....No spleen palpable.

No tenderness or pain present on palpation.

Slightly scaphoid abdomen.

Liver not enlarged.

On the next day, there was some improvement in the condition, but towards evening the temperature rose to 104.8 and the child died in the early morning, 36 hours after admission.

Postmortem Examination.

Chest. One large caseating gland in the hilum.

Lungs and heart were normal.

Abdomen. Spleen normal size, there were a few miliary tubercles on the surface of the organ.

Liver normal.

Kidneys. There were two or three miliary tubercles in each of these. They were otherwise normal.

Mesenteric glands were rather enlarged, but no caseation was present.

Other organs were normal.

Head and neck.

The brain was covered with a number of small miliary tubercles, mainly on the right side and on the base. In the latter region there was a little gelatinous pus. It did not extend to the cord. The brain did not appear congested to the naked eye.

The parathyroids were sent to the Bacteriological Institute, and Dr. Greaves reported that no abnormality was seen.

Discussion.

The interest of this case centres round the question of the tetany. The fact that illness had been noticed for only one month, implies that the course of the miliary tuberculosis was very rapid. The presence of acetone in the breath implied starvation or semi-starvation.

Tetany can be produced by a variety of causes, all of which can be reduced to a question of the disturbance of the calcium metabolism of the body. The age of the child excluded the possibility of infantile tetany, besides which there was no rickets nor gastro-intestinal disorder.

Tetany can however, be produced by an acute infection, of which miliary tuberculosis is one.

By fitting the above facts together, the course of events in this case is clear. The miliary tuberculosis produced a loss of appetite which led to a state of semi-starvation, thus upsetting the calcium metabolism of the body. The lack of calcium so produced led to the clinical picture of tetany, which overshadowed everything else from the time of admission until the child died.

I have to thank Dr. Greaves for his reports on the urine, cerebro-spinal fluid and section of the parathyroids.

A CASE OF CARCINOMA OF THE PANCREAS.

K. H. Uttley, M.A., M.D.

Medical Officer in Charge of Kowloon Public Mortuary.

The following notes on a case met with in the mortuary are of interest.

On the morning of 26.10.34. I examined the body of a young adult Chinese female, Wu Shun Mui, aged 27 years. Her husband told me the following history. . . . .

His wife had had no period for eight months, and the pair were expecting this their first child in a few weeks time. During the last eight months he had noticed nothing unusual about his wife, except that she was growing thinner and was rather weaker than she used to be. The previous menstrual history presented nothing abnormal.

On the evening before I saw her, she was engaged in cooking the evening meal, when she suddenly fell to the ground, rapidly became unconscious and died in the course of half an hour.

External Examination of the Body.

The body was that of a wasted, rather jaundiced adult Chinese female, with an enlargement of the abdomen the size of an eight months' pregnancy. The skin and conjunctivae were very yellow. The breasts were small and not those of a pregnant woman, and moreover, I could not palpate a pregnant uterus. There was no enlarged gland in the neck.

Internal Examination.

Chest.....Muscles very wasted, and yellow in colour.

Lungs. There was a frothiness in the bronchi, and the lung substance was very yellow. Otherwise there was nothing to note.

Heart. There was a slight, very yellow serous effusion in the pericardium, otherwise there was nothing unnsual.

Abdomen...The abodminal cavity contained several pints of bloodstained serous fluid. In the upper half there was a quantity of clotted blood.

Stomach. No disease present.

Intestines, normal.

Spleen slightly enlarged, but otherwise normal, both in colour and consistency.

Kidneys, normal.

Uterus small, non-pregnant, deeply stained with yellow.

Adnexa normal.

Liver . . . Greyish colour. Chronic venous congestion present. About a tenth of the whole liver substance had been invaded by a light yellow, firm scirrhous growth. This was situated on the anterior and inferior surfaces of the organ, and appeared to be the extension into the liver of a large yellowish mass, which was nodular and firm in consistency, situated in the Foramen of Winslow.

This mass lay above the stomach, to which it was not attached, and resting, as it were, in the lesser curvature of the latter organ. It involved the anterior and medial surface of the pancreas, from which it appeared to spring. (Fig. II)

The colon was below it, and not involved in it.

A number of hard enlarged malignant glands were found in the neighbourhood.

On section, the mass appeared to be firm and nodular, with numerous pockets of thick yellow inspissated fluid, rather like pus, each pocket being about ¼ of an inch in diameter.

The haemorrhage into the abdominal cavity had come from the perforation of a vessel in the mass by the invading cells of the tumour.

The gall bladder was normal, but distended with six ounces of clear yellow bile. The common bileduct was involved in the tumour. A section of the mass in the liver, kindly made for me by the Bacteriological Institute, showed it to be an adeno-carcinoma, with areas of necrosis and fatty change.

The cause of death was haemorrhage from a vessel invaded by the malignant growth.

Discussion.

The points of interest in this case are . . .

i.....The history of the case, which suggested a pregnancy. The sudden death might have been due to an eclamptic seizure.

ii....This appeared to be confirmed at first by the enlarged abdomen, and by the icteric colouring of the skin and conjunctivae.

iii...The relatives and the woman herself, apparently had not at any time suspected anything unusual about the "pregnancy."

iv...Pregnancy was, of course, excluded as soon as the breasts and abdomen were palpated.

v....The intense jaundice was produced by the blocking of the bileduct by the neoplasm in the course of its extension. This is common in growths in this region.

vi...The youth of the patient. She was only 27, (Chinese reckoning, which is 26 by European calculations). Cancers are more frequently met with in the fourties and fifties than in the twenties.

I should like to acknowledge my indebtedness to Dr. Greaves of the Government Bacteriological Institute for cutting the sections and to Prof. L. J. Davis of the Department of Pathology, The University of Hong Kong for the micro-photographs.

Review of Books

STROPHANTIN THERAPY.

Strophantintherapie by Prof. Dr. A. Fraenkel, Heidelberg. Berlin, Verlag von Julius Springer 1933. 148 p. 12.60 M.

Having closely followed the development of the treatment with intravenous injections of strophantin since 1905/6 when A. Fraenkel first introduced this therapy into medical practice I feel that it must be a great satisfaction to Professor Fraenkel to see his work, which for a long time has found only little approval among the medical profession, being recognised at last as a valuable improvement in cardiac therapy, and his method adopted by many of the leading cardiologists, at least those of his own country.

In his book Fraenkel modestly speaks of his method as of a further scientific development of the discovery and introduction of digitalis into therapy by W. Withering 148 years ago; strickingly enough we find that in its birthland digitalis and certainly strophantin have not made the same progress on their way of therapeutic use as f.i. on the Continent. Fraenkel lays stress on the statement that *digitalis and strophantin* are representatives of the *same chemical and physical group* of glycosides. Strophantin has no specific effect, which would discriminate it from digitalis preparations and whereas some authors such as Vaquez speak of a diastolic action of digitalis and a systolic effect of strophantin Fraenkel attributes this behaviour of the two substances to quantitative rather than qualitative differences. In the animal experiment digitalis and strophantin both show great similarity in their effects.

The acidity of the gastric juice renders the action of many drugs partly ineffective and in the case of digitalis makes the oral therapy rather unreliable; in strophantin we have a water-soluble preparation which can be injected intravenously without, even in higher than therapeutic doses, doing any harm. The substance is thus brought into contact with the heart directly with an immediate effect; these properties have made strophantin the ideal drug for experimental studies. The therapy with digitalis and all its various preparations and new substitutes lacks the accuracy with which we have learned by exact experiments and clinical experience to make proper use of the effects of strophantin for cardiotherapeutic purposes. *Strophantin therapy is scientifically best controlable and most efficient digitalis therapy.*

Fraenkel advocates the use of *k strophantin* Boehringer in preference to g strophantin Merck, as the latter is more toxic, its therapeutic and toxic dose being closer together. The *dosis letalis maxima* for rabbits is 0.34 mg. for k strophantin, but already 0.16 mg. for the g product.

To avoid misunderstandings it must be mentioned that the French preparation Ouabain, although derived from *strophantus gratus* of

West Africa, the same species from which g strophantin is prepared, is similar in its biological actions to k strophantin, the product of *strophantus* kombé of East Africa.

The following notes only refer to k strophantin. The *intravenous route* must be considered as the *safest way* of application because with due consideration to the effect of each single dose during the treatment we are able to administer the quantitatively exact working dose. The direct application further exerts the *strongest therapeutic effect* upon the heart *in the shortest possible time* and without in a series of injection leading to toxic accumulation. The injections can be continued for years without loosing in their therapeutic efficiency; if an increase in dosage or shortening of intervals becomes necessary it is due to worsening of the pathological conditions i.e. increase of the circulatory insufficiency.

Successful treatment with strophantin in cardiac cases requires exact registration of its reaction on the organism (pulse, respiration, weight etc.), the therapy must be handled in the way of a pharmacological experiment. *Slow injection* is recommended, covering the time of about 2 minutes, in order to obtain the maximum effect at the resorption by the heart substance.

Strophantin is *indicated* and effectfull *in all cases of cardiac insufficiency* from the lightest forms up to the highest degrees of cardiac hydrops, in acute heart failure, especially in the course of infectious diseases, as well as in chronic conditions. In inveterated cases of cardiac insufficiency in which digitalis preparations fails to improve the condition, strophantin often effects recompensation of the heart or at least alleviation from troublesome symptoms. Thorough knowledge of the strophantin therapy greatly adds to the understanding of the nature of cardiac failure and further leads to more exact criticism in the choice of the right way in our treatment.

I may mention here that, whilst Fraenkel and also the Vienna school restrict the use of strophantin to conditions of cardiac insufficiency, other clinicians among them Edens, one of the leading German cardiologists, who first was quite refractory towards the use of strophantin, extend the indications much wider and include also cases with acute attacks of angina pectoris and myocardial infarct, even in the first phase of alarming symptoms, as in their opinion angina pectoris and coronary thrombosis on the base of coronary sclerosis are already symptoms and signs of a latent insufficiency of the heart, for which strophantin by increasing the coronary blood supply is the most efficient cardiotonic remedy. It will be wise to wait for further clinical experience before the indication for the use of strophantin is extended thus far.

Dosage. Only 9% of the strophantin, intravenously introduced into the system, is resorbed by a heart of average size and this amount

represents the working dose; a hypertrophic heart will absorb more, a partly degenerated myocardium less, therefore it is not possible to recommend a fixed initial dose in general, the dose will vary according to individual conditions, but *0.5 mg.* will *for most cases* be the *initial dosis efficans*. For further treatment the effect of the *initial dose must be the guiding factor*. The aim is to gain an optimal effect with a minimum dose. With about 0.3 mg. daily or 0.5 mg. every other day the treatment can be continued for a long period but certainly under strict clinical control, if possible also with the electrocardiograph; a patient with hydrops should not loose more than 2 lbs. in 24 hours and should be kept in bed during the treatment. If the rules for the administration of the drug are strictly followed untoward effects are very rarely observed, if they happen, they are mostly due to an overdosage. The addition of euphyllin and a solution of glucose to the strophantin is recommended.

A *rational therapy with strophantin, started not after digitalis preparations have failed but before other drugs have done so,* is able to change the whole aspect of chronic heart failure, the long sufferings with terrible agonies of the "wet insufficiency will be spared to the patient in favour of a painless death in the dry form of failure.

To medical men in China, where conditions of heart failure seem to me to be on a rapid increase, the study and practice of the treatment with k strophantin can strongly be recommended as in many ways superior to the treatment with other cardiac drugs in all cases of heart failure.

M. O. PFISTER.

"*Experimental Physiology.*" By Sir E. Sharpey-Schafer, F.R.S. 5th Edition, Longmans Green & Co., London, 6/- Net.

This edition has been revised by the author with the help of W. A. Bain, B.SC., PH.D., and in its 168 pages presents a very useful practical course for medical students. The experiments range from those to be carried out on frogs, cats, dogs, etc., to those on the human, and only those of most interest and importance to the future clinician are chosen. Of special value to those in isolated and impecuneous departments where apparatus can not be easily purchased, but has often to be made in the laboratory itself, the chapter on electrical apparatus is of special interest and value.

The appendix provides a small amount of information for those preparing class demonstrations or practical work, of which the note on anaesthetics is perhaps the most valuable.

"*Diseases of Women.*" By Ten Teachers. 5th Edition. 568 Pages. 185 Illustrations and 8 Colour Plates. 18/- net.

Little criticism can be directed against a book which has passed through four Editions, and which represents (as it must) current Gynaecological opinion in London. It is pleasantly written, and very suitable for students and practitioners.

The Authors have very carefully brought this Edition up to date, dealing with work on the ovary and other endocrines, and their relation to menstruation and so forth.

The book is certain to maintain its popularity, and we have no hesitation in recommending it.

"*Fellowship Examination Papers for the Diplomas of the Royal College of Surgeons, Edinburgh, 1931-1935.*" E. & S. Livingstone, Edinburgh. 2/6 net.

This small book of 44 pages contains the papers for Surgery Surgical Anatomy and Surgery and Surgical Anatomy for the single Licence Examination, the Surgery and Surgical Anatomy papers for the Fellowship Examination, and all the papers for the optional subjects.

It therefore provides excellent tests for senior surgical students and for those preparing for higher surgical examinations.

Acknowledgements.

St. Bartholomew's Hospital Journal. Vol. XLIII. Nos. 1 & 2. October & November, 1935.

Bulletin of the New York Academy of Medicine. Vol. II. No. 10. Second Series October, 1935.

Revista de la Facultad de Medicina. Vol. III. Nos. 8 & 9. February & March, 1935.

St. Mary's Hospital Gazette. Vol. XLI. Nos. 8 & 9. October & November, 1935.

Revue Medico-Chirurgicale de Jassy. Vol. XLVI. Nos. 3 & 4. 1935.

Mededeelingen van den dienst der Volksgezondeheid in Nederlandsch-Indie. Vol. XXIV. Supp. of No. 3. 1935.

The Journal of the Shanghai Science Institute. Vol. 1. Sec. IV (pp. 215-233) Separate. October, 1935 print No. 14.

The Broadway. Vol. R6. No. 4. Autum, 1935.

The American Journal of Physical Anthropology. Vol. XIX. No. 1. April-June, 1935.

The D. H. Medical Journal. Vol. XII. No. 11. November, 1935.

The Hospital. Vol. XXXI. No. 12. December, 1935 and Vol. XXXII. Nos. 1 & 2. January & February, 1936.

Unitas. Vol. XIV. Nos. 6 & 7. December, 1935 & January, 1936.

The Manchester University Medical School Gazette. Vol. XV. No. 2. December. 1936.

The Post-Graduate Medical Journal. Vol. XI. No. 122. December, 1935 and Vol. XII. No. 124. February, 1936.

Tung-Chi Acta Medica. Vol. V. No. 4. December, 1935.

The D. H. Medical Journal. Vol. XII. No. 12. December, 1935.

The Far Eastern Medical Journal. Vol. 13. No. 12. December, 1935.

The Journal of the Shanghai Science Institute. Sec. IV. Vol. 1 (pp. 235-270). Separate Print. No. 15. October 1935.

Chiba-Igakkai-Zasshi. Vol. XIII. No. 12. December, 1935.

Revista de la Facultad de Medicine. Vol. III. No. 9. March, 1935.

The Middlesex Hospital Journal. No. 224. December, 1935.

The North Wing (Magazine of the Sheffield Medical School). Winter. 1935.

The Journal of the Severence Union Medical College. Vol. III. No. 1. December, 1935.

The Keijo Journal of Medicine. Vol. 6. No. 2. October, 1935.

Okayama-Igakkai-Zasshi. Vol. 47. No. 12. December, 1935 and Vol. 48. No. 1. January, 1936.

The Queen's Medical Magazine. Vol. XXXIII. No. 2. December, 1935.

Bulletin of the New York Academy of Medicine. Vol. 11. No. 11. November, 1935. Second Series and Vol. 12. No. 1. January, 1936. Second Series.

The Birmingham Medical Review. Vol. X. No. 4. December, 1935.

St. Thomas' Hospital Gazette. Vol. 35. No. 6. December, 1935.

The Tohuku Journal of Experimental Medicine. Vol. 27. No. 6. December, 1935.

The Nagoya Journal of Medical Science. Vol. 9. Nos. 2 & 3. November & December, 1935.

St. Mary's Hospital Gazette. Vol. XLI. No. 10. December, 1935 and Vol. XLII. No. 1. January, 1936.

Taiwan-Igakkai-Zasshi. Vol. XXXIV. No. 10. October, 1935 and Vol. XXXV. No. 1. January, 1936.

Fukuoka Acta Medica. Vol. XXVIII. No. 12. December, 1935 and Vol. XXIX. No. 1. January, 1936.

Mitteilungen aus der Medizinischen Akademie zu Kioto. Vol. 16. Nos. 1 & 2. January & February, 1936.

St. Bartholomew's Hospital Journal. Vol. XLIII. Nos. 3 & 4. December, 1935 & January, 1936.

Epidemiological Report of the Health Section of the Secretariat. Nos. 10 & 12. 14th Year. October-December, 1935.

Lingnan Science Journal. Vol. 15. No. 1. January, 1936.

The Ulster Medical Journal. Vol. V. No. 1. January, 1936.

Anales de la Universidad Central. Vol. LV. No. 294. October-December, 1935.

Bulletin de la Societe Medico Chirurgicale de L'Indo-Chine. Vol. XIII. No. 9. November, 1935.

McGill Medical Undergraduate Journal. Vol. 5. Nos. 1 & 2. November, 1935 & January, 1936.

University College Hospital Magazine. Vol. XX. No. 6. November, 1st December, 1935.

Health & Empire. Vol. X. No. 4. December, 1935.

King's College Hospital Gazette. Vol. 15. No. 1. January, 1936.

The Journal of Bone & Joint Surgery. Vol. XVIII. No. 1. January, 1936.

Revista dos Cursos. Vol. XXI. No. 21. 1935.