SOME OBSERVATIONS ON GYNAECOLOGY AND OBSTETRICS IN NIGERIA.

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INTRODUCTION.

These observations are the result of an eighteen months' tour in Nigeria, West Africa, of which half the time was spent in the Southern Coastal Capital of Lagos, and the other half in one of the largest northern towns—Kaduna. The publication has a twofold aim. Firstly, it is thought that the contrasting gynaecological and obstetrical problems may be of interest to many and, secondly, it may stimulate some of those who are already in the West African Medical Service or who may be going into it to study more closely one or other of the problems raised and, I hope, to contradict some of the dogmatic statements made. In no way is the publication intended as a scientific analysis of the many and varied subjects discussed although a few figures and percentages are quoted to uphold certain statements.

Brief mention must be made of the conditions under which these observations were made. In short, it can be said that these were ideal and that the courtesy and facilities placed at my disposal and the equipment available were nothing short of miraculous. For example, the subject most closely studied was some 200 cases of sterility. For this I had at my disposal a separate examination room with a most excellent gynaecological couch and a well-trained nurse in attendance at any time that was desired. The pathologists appeared to welcome innumerable cervical and urethral smears, Ide tests, seminal examinations and sections of any pathological specimens obtained. In Lagos, there was even the most excellent pathological photographic department. Apparatus for tubal insufflation and endometrial biopsy was available and, although lipiodol hysterography could be done in special cases, wartime restrictions on X-ray plates cut this procedure to the bare minimum.

These notes are based on approximately 2,000 gynaecological and 400 obstetrical cases seen. The figure is small and I am fully aware that many observations made are not in agreement with those who have had more experience. Particularly am I aware of the dangerous ground on which I tread when I give my views on tribal customs, &c. Unfortunately, there is practically no literature available on the gynaecological and obstetrical conditions found in West Africans and this paper is submitted in the hope that it may produce better and more scientifically observant literature on the subject from others. Certainly, I can think of nowhere in the world which is more open to research.

GONORRHOEA.

The cases seen in the out-patients clinics and gynaecological wards in Nigeria present many differences from those commonly seen in this country. In the former, the greatest gynaecological problem is gonorrhoea, its complications and sequelae. To give some idea of its prevalence, the following figures may be quoted:

(i) In a native military unit of 250 men, approximately 30 per cent attended with acute gonorrhoea over a period of twelve months. This figure is, no doubt, higher than among the civilian population who are settled with their wives.

(ii) In the South, taking routine cervical smears from 100 cases of sterility, gonococci were demonstrated in 16 cases; in 46 other cases a pathological vaginal discharge containing pus cells was present.

(iii) In the North, out of 85 cases examined, only 2 had proved gonorrhoea but the number with a pathological vaginal discharge was comparable with that found in the South.

Taking these and other factors into consideration, I am of the opinion that, in the South,
about 80 per cent of the African population in Nigeria has had gonorrhoea before the age of 20, and that, in the North, the figure is not far short of it. Certain prejudices, tribal customs, etc., are partly responsible for this. For instance,

(1) The belief that intercourse with a virgin will cure the disease is strong—as indeed this belief is not unknown here. In the last five months, 6 cases of acute gonorrhoea in girls between the ages of 8 to 12 years were seen—all prepubertal and acquired by intercourse.

(2) The belief has been expressed to me on several occasions that it is impossible to have children unless gonorrhoea has been acquired.

(3) Roughly speaking, wives are paid for in numbers according to the wealth of the husband and, at any rate in the Ibo tribe, a man is not allowed to live with his wife for two years after the birth of a child. Thus a young man who cannot afford more than one wife often acquires gonorrhoea during this period.

Although education and the Medical Services are gradually improving this state of affairs, it will be seen that many Africans do not look upon gonorrhoea as a disease and certainly there is little of the stigma attached to it which there is at home. A naive obituary notice in a Sierra Leone newspaper will illustrate this attitude. The deceased was an African missionary "who in spite of being a martyr to gonorrhoea for many years continued in his work as a missionary to the end."

There are many differences between gonorrhoea as encountered in Africans and at home. The infection is very much milder and, except in conjunction with complications, no febrile reaction has been seen. The number of cases of salpingitis, pyosalpinx, and tubo-ovarian abscesses is large. No less than 20 out of 100 cases of sterility in the South showed clinical findings of one or other of these conditions. In both South and North, of 60 cases tested for tubal patency and showing no clinical evidence of tubal disease about 50 per cent were found to be non-patent. And yet, in spite of these figures, no case of ectopic tubal gestation was seen and I only heard of one case operated on for the condition. This strongly suggests that the theory that adhesions and tubal inflammation are factors in the etiology of this disease is false.

Tubo-ovarian abscesses are often of great size and five, ranging in size from a grapefruit to a melon, have been removed or drained. In some 35 of abdominal sections, a pelvis free from adhesions or inflammation has not been seen, with the exception of the girl with the imperforate vagina (Case 3). Bartholonitis is exceptionally rare, only two cases being seen and both of these in the last month. On the other hand, vaginal adhesions, which I think are due to prepubertal gonorrhoea, of almost (but never quite) complete vaginal atresia were seen. In all, the upper end of the vagina was affected.

Case 1.—A woman, well advanced in labour, was referred from Massey St. Dispensary to the African Hospital, Lagos, because, on vaginal examination, the cervix could not be felt. On speculum examination in the theatre an opening, which would just admit the point of a probe, was located in the upper right hand corner of the vagina. The introduction of one finger was therefore done. At operation the cervix was found to be half dilated.

These cases of vaginal adhesion in no way resemble congenital vaginal atresia in which a hard cartilaginous ring can be felt at various vaginal levels. In three other cases, partial adhesion of the labia minora was seen.

Case 2.—Gonorrhoea with sulphapyridine anuria. African girl, aged 13, admitted with acute gonorrhoea. Thick yellowish white discharge, associated with urethritis and vulvitis. Smear—numerous pus cells with intracellular G.C. Started on M & B 693, tabs 4 stat, and tabs 2 four-hourly. (The usual custom was to give 1 gram of the tablets suspended in sterile water intramuscularly for four days—this procedure was found to be not only very economical but, with the associated pyrexia of 102°-104° F., usually gave a certain cure). The local condition rapidly improved but, on the fourth day, the patient apologetically announced that she had a pain in the left loin and had not passed urine for three days—was that all right? She had a tense cystic swelling in the left loin the size of a melon and a blood urea of 240 mgm. per cent. At cystoscopy the right ureteric orifice could not be seen; the left appeared normal. There was no urine in the bladder. A ureteric catheter was passed up the left ureter and, very soon,
a snake-like blood cast of the ureter appeared alongside the catheter. About ¼ inch of this extruded itself into the bladder every ten seconds and, after about 9 inches, urine poured freely down the ureteric catheter. This was left in situ for twenty-four hours during which time 14½ pints of urine drained. Fluid output satisfactory for the next three days and blood urea reduced to 60 mgm. per cent. Unfortunately, just when further renal investigations were going to be done, the patient got tired of hospital and "went for bush." There is little doubt that some interesting congenital abnormality of the renal tract would have been found.

OTHER VENEREAL DISEASES.

Other venereal diseases such as syphilis, soft sores, buboes and lymphogranuloma inguinale are comparatively common. In the North, the Ide test (which is used in place of the Wassermann and Kahn Tests) shows that about a third of all cases admitted to hospital are positive. The significance of this is obscured by the fact that yaws among other diseases gives a positive reaction.

Lymphogranuloma inguinale in women often affects the posterior vaginal wall and rectum. In two cases spontaneous recto-vaginal fistula developed. A hard brawny mass is formed and not infrequently rectal strictures ensue. It is said by some to respond to sulphonamides, antimony, etc., but, in my limited experience, nothing would seem to make much difference when it affects the rectum and vagina and they are some of the most difficult and disheartening cases to deal with. A permanent colostomy is probably the surgical treatment of choice but is eminently unsatisfactory in Africans. Gradual dilatation appears to be useless and in the one case in which dilatation was performed under anaesthesia the patient died a few days later from peritonitis.

There is another (?) venereal disease in African women which is quite common in the North. It is an acute vaginitis associated with multiple small superficial ulcers on the vaginal mucosa and not infrequently extending on to the vulva. The ulcers are very painful and bleed easily on being touched. A Gram stain smear shows spirochaetes morphologically indistinguishable from those found in ulcerative gingivitis. About 24 of these have been observed, the majority occurring in minor epidemic form during a two months period when "Vincent's vagina" became clearly recognized as a clinical entity. The cases respond well to intravenous N.A.B. and stovarsol vaginal insufflations, the average stay in hospital being seven to ten days. The condition is mentioned in some textbooks but I have never seen a case at home. No similar lesions have been observed in men and, unfortunately, none of the husbands of infected cases were examined. It is not, therefore, known if they are of venereal origin.

DISORDERS OF MENSTRUATION.

Dysmenorrhcea is a common complaint, being a symptom in no less than 60 out of 100 cases of sterility. Of these it was estimated that 36 were cases of congestive dysmenorrhcea. Of the 24 not classified as congestive, 2 were proved at exploratory laparotomy to be due to endometriosis and it was suspected that several others were of this origin. The bulk of the remainder were spasmotic dysmenorrhcea, in most cases due to clinically demonstrable undevlopment of the genitalia, as will be considered more fully later.

Menstruation in the African is popularly thought to occur at an early age—but, from the questionnaire of 42 cases of sterility, who confidently stated that they knew the age at which menstruation started it was surprising to find that the average age was 15. No less than 13 stated that menstruation had started at 16 or over. But, taken as a general average of the population, I think these figures are misleading because (i) the cases were those of sterility in which menstrual dysfunction is to be expected; (ii) the histories given are very unreliable; (iii) it is a common sight to see girls who certainly do not look more than eight or ten with breast development.

Three cases of primary amenorrhcea were encountered. One was a woman of 35 who weighed 17 stones. Mentally she was very alert and showed no other sigmata of endocrine disorder beyond the excess of weight and her genitals. The vagina admitted only one finger,
was 2 inches long and at the vault was a minute cervix. The uterus could not be felt (? obesity). She was given a course of stilboestrol and, although no clinical benefit can honestly be claimed, she insisted that it was doing her so much good that she continued to take the tablets to my knowledge for four months. In another case, nothing was found beyond uterine hypoplasia.

Case 3.—A woman aged 18/20 gave the history that she had never menstruated, had very recently been married and dowry money of some £30 had been paid to her father. Her husband was going to take her to law and claim back the money. Her mental condition was utterly pathetic. On examination she was a well-built girl, rather stout. The skin was thick and there was other clinical evidence of hypothyroidism. The breasts were large. Abdomen : N.A.D. except very scanty pubic hair. There was complete atresia of the vagina and under-development of the labia especially posteriorly. P.R.—no uterus or adnexae felt.

It was decided to perform McIndoe's vaginal plastic operation after exploratory laparotomy. When the abdomen was opened a complete bicornuate uterus was found, each horn about a finger in width and 4 inches long (including tube). The ovaries appeared to be fully developed but the cervix was represented only by a small fibrous nodule. No vagina could be identified abdominally. With the abdomen still open, the patient was placed in the lithotomy position. Two silkworm sutures were then passed on long straight needles from the vaginal dimple, until they were seen abdominally at the cervix. The abdomen was closed and ten days later the vaginal operation was undertaken. After following the silkworm guides for 3-4 inches a bicornuate vagina about 2½ inches long was encountered. The septum between was divided and a vaginal dilator the size of a large Ferguson's speculum was left in situ, comfortably accommodated. Unfortunately, I moved about fourteen days after this operation, when everything was going according to plan. The change in her mental condition was fairly remarkable when she was informed that there was a good chance of the operation being successful. Unfortunately this was not to be the case as I was informed that considerable contracture had supervened. Ten months later every effort was made to find her for examination but unfortunately the envoys could not convince her that it was not a trick to get some money from her.

In another case who menstruated, two separate and equal cervices were seen at the vaginal vault. She failed to turn up for hysterography. Apart from these examples of gross abnormality of development, many other minor abnormalities were seen and I have heard of many other gross and interesting abnormalities. There is no doubt that these are much more common in Africans than in Europeans. Mytropathia hæmorrhagica, polycystic ovaries, etc., are extremely rare.

Other Gynaecological Conditions.

On the other side of the balance sheet there are many gynaecological conditions which fill the out-patient clinics and wards at home, yet which were rarely or never encountered in Nigeria. Vaginismus has not been encountered and in every case complaining of dyspareunia there has been sufficient cause found. Kraurosis vulvae, pruritis and leukoplakia were not seen. It seems almost incredible but not a single case presenting any of the numerous symptoms or signs associated with the menopause sought treatment.

Only one case of carcinoma of the cervix was encountered—carcinoma of all types is rare and cannot be fully accounted for by the fact that Africans die at a comparatively early age. The chronic cervicitis—backache syndrome—was not seen in spite of the frequency of gonorrhoea.

Four cases were diagnosed as fibromyoma of the uterus but, in the one case in which the patient was willing to undergo operation, this proved to be a painless tubo-ovarian abscess adherent to the fundus of the uterus.

There has been only one case of ovarian cyst (of any size). Even this was unusual, for it was a right-sided bilocular cyst, one locule containing about 1½ gallons of slate-grey fluid and the other ½ gallon of darker fluid. In addition she had a dermoid cyst the size of a small melon in the left ovary and a pyosalpinx on the right the size of an orange.

Prolapse of the genital organs is very rare. The only two cases causing symptoms meriting
surgical interference were both complete prolapses of the uterus and both giving a clear history of the prolapse dating from the day of delivery. I believe this is due to the custom of the women getting on to their feet soon after delivery and naturally having to use their pelvic muscles from the start.

Obstetrics.

The striking factor about obstetrics, in the North at any rate, is the rarity of any obstetric emergency or serious complication. I am not competent to speak of the South. There has been only one case of forceps delivery and two of prearranged Caesarean section. One of the latter had had seven previous births, all long labours and all ending in stillbirth or neonatal death within a few days of delivery. Her diagonal conjugate was 3½ inches. The other was a flattened pelvis who had a trial labour. Two other Caesarean section operations were performed in the South, one the case of vaginal atresia already mentioned and the other a case of contracted pelvis. Only one case of placenta prævia was seen—of the third degree—and she delivered spontaneously a stillborn child after rupture of the membranes. Severe puerperal sepsis has not been seen. This is because the haemolytic streptococcus is, for practical purposes, unknown in Nigeria. Mild pyrexia with slightly offensive discharge is occasionally seen.

In spite of the rapid growth of antenatal clinics and hospital obstetrics, the vast majority of African women still have no medical obstetric attention. It is surprising the rarity with which emergencies are admitted but there is no knowledge of how many women die in the "bush" from native medicine. On the rare occasions when they are brought in from the bush their condition is usually perilous. Two such cases may be quoted. One was a case of twin delivery—the first child was born spontaneously and the mother was brought in many hours later with the arm of the second child prolapsed. After delivery she developed an enormous vesico-vaginal fistula which was undoubtedly due to prolonged pressure. The large number of vesico-vaginal fistulae seen are mostly due to native "medicine." The other was a case of persistent occipitoposterior position and in this the chief treatment appears to have been to fill the vagina with cow dung. After cleansing and rotation she spontaneously delivered a live child and had a normal puerperium.

During labour no form of analgesia or anaesthesia is asked for or given. It is rare to hear more than the grunts of bearing down. Tears are uncommon and never serious in extent. The patient is officially allowed up on the second day and goes home on the third to sixth day according to the bed state or, as like as not, her own will. Two cases of foetal abnormality have been encountered and one case of hydatidiform mole. Abortions occur at approximately the same rate as at home.

The type of pelvis encountered is undoubtedly more inclined towards the anthropoid as opposed to the usual gynæcoid seen in Britain. The normal measurements are on the average in the region of 8 inches interspinous, 9 inches intercristal and 7 inches external conjugate. There is marked difference of about 2 inches in the lateral diameters whereas the antero-posterior diameter differs by only ½ an inch. Also the external appearance of the patient is commonly anthropoid although it must be admitted that this appearance is as frequently android. However an internal type of android pelvis is very rarely palpated and the labour complications associated with this type of pelvis were never seen. As a result of the android pelvis, posterior presentations are commonly seen and several births occur of spontaneous delivery, face to pubis. Male distribution of pubic hair is undoubtedly commoner.

During the antenatal period the problems which commonly arise are different. Toxæmia of pregnancy is very uncommon. I understand from Dr. Ogle that this is not so in Lagos and, if albumin is found in the urine, it is more likely to be due to ankylostome anaemia while headaches are more commonly malarial. No case of accidental hæmorrhage has been seen. Vomiting of pregnancy is rare, but one case was sufficiently severe to merit admission to hospital, and indigestion during early pregnancy is not uncommon.

Pyelitis of pregnancy is not so common.
The uterus at full term rarely exceeds the equivalent of thirty-four to thirty-six weeks at home and the average weight of the children is 5½ to 6 lb. at birth.

In spite of the universality of gonorrhoea not a single case of ophthalmia neonatorum has been seen which is indeed extraordinary in view of the large number of births outside the hospital where no prophylactic treatment is given. Gonococcal conjunctivitis in children from two to seven is, however, not uncommon.

Two cases of icterus neonatorum have been seen.

An interesting feature of which perhaps many are not aware is that all African babies are born white and it is not for several days that many of them can be distinguished from European infants. Presumably this is due to the fact that melanin pigment must be exposed to light rays before the dark colour appears.

The women (with one exception) were universally circumcised. I have read accounts where in other countries this so-called mutilating custom has caused very considerable degrees of obstetric difficulty and even disaster. This has not been encountered in Nigeria. Considering the young age at which the operation is performed in Ibos, it is indeed extraordinary what little mutilation it causes. Many cases have been seen of true circumcision of the clitoral prepuce, the organ being left intact. Occasionally, however, the labia minora are encroached upon to a varying degree and the rule is partial or complete clitorectomy.

There are many other interesting features concerning gynaecology and obstetrics in Nigeria which space does not permit of recording.

In conclusion, I should like to take this opportunity of thanking all members of the Nigerian Medical Service with whom I had the luck to come into contact, in particular Dr. Campion and Dr. Ogle, both of whom have gone out of their way to help me, and who have provided facilities for holding clinics at inconvenient hours so that the times would not interfere with military duties.

I am also indebted to the military authorities for permission to forward this paper for publication.