Papers and Originals

Curiosa et Exotica*

(WITH COLOUR PLATE FACING PAGE 798)

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The title of this address was first used in the announcement of a series of classes for medical students as part of their course in pathology. That was at a time when students' attendance had become so meagre that lecturer and lantern operator had been known to outnumber the audience. I had hoped then, though vainly, that a provocative title, matched by topics of appropriate interest, might attract the young away from the various competing duties and other considerations that made coming to classes difficult. Perhaps it was the five miles of London traffic between hospital and classroom that defeated the best intentions.

Some may think it inauspicious, or worse, to propose the same title for a President's address to his Section of the Royal Society of Medicine. But my reasons for the choice are not the same as on that earlier occasion, for attendance at meetings of the Section of Pathology is not so unsatisfactory that we need be coaxed here with gimmicks. The truth is that I cannot offer an address such as the section has been privileged to enjoy from the succession of distinguished pathologists who have held this presidential office until now. There were accounts of original research, of their own often outstanding contributions to knowledge; or they were thoughtful and authoritative reviews, or personal philosophies reflecting a deep concern for pathology. My address is no more than a collection of experiences such as any pathologist might recount. Judge it, please, as such—and, I hope, find among these curiosities some that are novel and of interest.

1. Anthrax Meningitis, 1907

I have been proud to tell from time to time about one or another of the *Curiosa* among such of my father's notes as escaped destruction through time, travel, thoughtlessness, and two world wars. Though his records were carefully kept he was not given much to writing papers. I believe my audience will understand my wish, on this occasion that he would have so appreciated, to open the series of histories with one from his collection.

To most contemporary pathologists in this country the special interest of this case of anthrax meningitis will be in Fig. 1 (see Colour Plate)—a water-colour of the brain. The necropsy, carried out by my father at the Union Infirmary in Belfast in 1907, was attended by a young doctor from St. Thomas's Hospital, London, who was on a visit to Ireland. The visitor, whose initials are the signature to the sketch that he made during the demonstration, was Henry Roy Dean—later to be professor of pathology successively in Sheffield and in Manchester, and, from 1922 until his death in 1961, in Cambridge. I am sure this picture, which has not been published before, will take its place among our many other recollections of the artist, "The Old Man," Dean of Cambridge.

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2. "Enteric Pediculosis"?

This history also concerns a Cambridge man, though of a later generation. I think Professor Dean would have enjoyed hearing it, for he appreciated a droll tale. Its subject was a house surgeon who developed what seemed clinically to be acute appendicitis. At laparotomy the appendix was normal but the omentum was wrapped round an acutely inflamed Meckel's diverticulum, which was removed. When the diverticulum was opened in the laboratory a hard mass impacted in its blind end proved to be the foreign body that is illustrated in Fig. 2—a highly polished block of Perspex containing three human body lice (dead). This was immediately familiar as one of a collection of parasitological specimens thus conveniently preserved in the department of pathology in the University of Cambridge. The biopsy examination thus suggested that the patient was a Cambridge man, a diagnosis that was confirmed at the bedside.

Nine months earlier, in Cambridge for a few days' revision before the pathology part of his Final Examination, the patient had called on one of his teachers in the department. While chatting he picked up the block of lice. Thoughtlessly toying with it, he was biting on it gently when somebody bounced into the room without warning: he jumped up to avoid being sent flying by the opening door, and in doing so swallowed the specimen. He realized what had happened but did not mention it to any one, expecting to be able to return the object shortly. When it failed to appear he assumed he had overlooked it. The exams drove the incident from his mind until the surgeon and the pathologist came to quiz him after his operation.

Three Cases of Leprosy

3. Leprosy and Rhinosporidiosis

This case of leprosy concerned another medical student, though by the time the diagnosis was made she was qualified and in specialist practice, and healthy. An Indian, she recognized her own rhinosporidiosis correctly by clinical examination. This caused quite a stir in the medical school in Britain at which she was a student. Her E.N.T. teacher had little choice but to do as she said and remove the polypoid nasal lesion. One of her pathology teachers, president of the R.S.M. Pathology Section for 1969-70, first saw rhinosporidiosis himself in 1948, in her pathology sections; though all he did was confirm her diagnosis, he was observed to be rather smug about his part in the novel event. He overlooked the coexistence of leprosy with the rhinosporidiosis until 11 years after the biopsy that all the time had combined the evidence of both infections. Ten years later still, it is good to know that she remains free from further manifestations of either of them. Her case has been described (Symmers, 1967, Case 9) and illustrated (Symmers, 1966b, Case 34) elsewhere.

One of the notable things about this patient's history is that there have never been any clinical manifestations of leprosy. Yet there was no mistaking this diagnosis histologically,

once the eventual (and fortuitous) use of the Ziehl-Neelsen stain had shown the bacilli. She was born and spent most of her childhood in a leprosy hospital, where her parents were on the staff. Presumably, her leprosy infection has been an instance of spontaneous regression of subclinical disease.

4. Lepromatous Leprosy

One does not walk into a teashop in England and, with equanimity, see one of its staff with the leonine facies of lepromatous leprosy, so typical that it could worthily illustrate an elementary textbook. Face to face with this problem, what should the customer, being medical, do? What in fact was done is a story too long to print here.

The woman had been under treatment for leprosy before she left the West Indies four years previously. She had been two years in Britain when she realized that the disease was again progressing. She decided not to go to a doctor, fearing (needlessly) that she might be sent back to the West Indies. Instead, she got relatives at home to send her a supply of a plant that evidently is of some repute as a folk remedy for leprosy. She refused to identify the plant or to provide a sample of it. Whatever it is, it must have some activity against the disease, for her account leaves no doubt that she suffered quite a severe local reaction after a couple of weeks of self-medication with a "tea" brewed from it. Fortunately, a West Indian ward sister was able to persuade the patient to come to hospital. The diagnosis was confirmed and the condition responded to treatment with a sulphone. Eventually, homesick for the sun and the sea, she went back to the Islands, where she continues to do well, still under orthodox treatment.

5. Leprous Lymphadenitis

A young philanthropist was at home on leave in Europe after his third successive three-year tour in eastern Africa. He felt unwell, had some fever, and complained of tenderness and moderate enlargement of the superficial lymph nodes in the neck, armpits, and groins. There was patchy, slightly desquamative erythema of his face, trunk, and limbs. No mucosal lesions were seen. The Wassermann reaction was positive, a finding precipitately communicated to the patient, with particular embarrassment when the negative results of Kahn, V.D.R.L. (Venereal Disease Research Laboratory), and *Treponema pallidum* immobilization tests came to hand. The peripheral blood showed a moderate monocytosis, with vacuolation of some of the cells, so that the possibility of monocytic leukaemia was considered and eventually discounted. The Paul-Bunnell test was negative. There was no malaria. Biopsy of an axillary lymph node showed widespread proliferation of large rounded mononuclear cells with pale vacuolate cytoplasm (Fig. 3), a picture typical of a form of lymphadenopathy that occurs sometimes in leprosy and that I have seen in only one other condition (see Case 6). In the Ziehl-Neelsen preparations many of these cells were seen to be crammed with acid-fast bacilli. The diagnosis of leprosy was confirmed by finding the organisms in the skin lesions. The infection has responded well to sulphone treatment.

6. Lymphadenopathy after Injection Mammoplasty

In haematoxylin-eosin preparations the picture of the leprosy lymphadenitis illustrated in the previous case (Fig. 3) was exactly simulated in an axillary lymphadenopathy associated with mammoplasty. The patient's employment as a waitress in a "topless" restaurant required that her bust be augmented artificially to conform to the minimum specifications for the job (Symmers, 1968, Case 1.). She had had a series of injections into both breasts of what was said to be silicone fluid. Eventually, progressive fibrosis led to marked mam-

mary disfigurement. Biopsy showed extensive granulomatous became necessary for both breasts to be amputated.

Since publication of the original report of this case I have been told that silicone fluid does not cause any reaction in tissues and is not absorbed, and that therefore the findings in the patient's breasts and lymph nodes should be due to adulteration of the material that had been injected. Silicone fluid suitable for injection is not permitted to get into the hands of unethical practitioners.

7. Mammoplasty, circa 1880

There used to be a specimen of wax mastitis in the old surgical museum in the Queen's University of Belfast. The patient had been a well-known demimondaine in the Dublin society of the 1880s. In middle age, in order to preserve the amplitude of her bosom, necessary to ensure justice to her couturière's creations, she repaired to Paris, where a leading member of the Faculté inoculated both breasts with paraffin wax, moulding them to the desired fashion. Inevitably, the eventual outcome was a cruel deformation through sclerosing mastitis, complicated by sinuses that followed misguided attempts to evacuate the wax by way of multiple incisions. It became necessary for both breasts to be amputated.

The patient's story was told me, as a student in the 1930s, by the late Surgeon T. S. Kirk, of Belfast, who had been present when the mastectomies were done while he was a surgical dresser in the old Royal Hospital in Frederick Street 40 years earlier.

8. *Ulmus fulva*—An Unusual Cause of Infertility

A medical couple, in their 30s, consulted a gynaecologist because in six years of marriage they had failed to start a family. Investigation of the husband showed nothing amiss. When his wife was examined a mass was felt on each side of the uterus. Laparotomy established that both ovaries and uterine tubes were virtually obliterated by dense and widespread adhesions. After this operation the patient had a succession of episodes of severe pelvic pain, until hysterectomy was performed, with removal of both tubes and ovaries and the mass of scar tissue that they were buried in.

At the first laparotomy the surgeon took several pieces of tissue for histological examination. All showed the same picture—a sclerotic granuloma from the presence of innumerable fragments of plant tissue (Fig. 4).

After these findings the full story was told. While a student the patient had become pregnant. Her own and her fiancé's families, perhaps unaware of the situation, were resolutely opposed to their marrying before their studies were completed. The fiancé (he later became her husband) broke into the forensic museum of his university and stole a specimen of the bark of the slippery elm (*Ulmus fulva*). He sterilized it in an oven, and then, a colleague giving the anaesthetic, inserted it aseptically into his fiancée's cervical os. She aborted, and survived. Presumably, he pushed some of the bark through the posterior fornix or the wall of the cervix, thus accounting for the eventual foreign-body granulomatosis in the pelvis.

9. Multiple Fractures—I

A hospital's star footballer had a gift for most sports. His latest interest was karate, and he was as actively engaged in mastering this as in working for his M.B. It was 1968, the year when crème de menthe on the rocks was widely advertised in London Transport trains by a "coooooo!" girl whose man broke the ice with karate strokes. Our sportsman was a merry and most welcome guest at Christmas parties in his hospital. Being a good mixer, he was taking his turn behind the bar, occasionally sharing in the hospitality that he

dispensed for his hosts. Someone saw him about to use an ice-pick to replenish the stock of crushed ice and at once suggested that he demonstrate his new skills by smashing the block of ice karate-wise instead. A regular and observant traveller on the Underground, he recognized the challenge and accepted it.

He spent Christmas in the hospital with a compound fracture of the fifth metacarpal and a fracture dislocation of the wrist. He has not played football since, but he won the orthopaedics prize and passed finals at the first try.

10. Multiple Fractures—II

A doctor went to a local hospital to visit a neighbour who was in the casualty ward with a broken leg. When leaving the ward the doctor slipped on the highly polished floor, fell, and broke the neck of his left femur. He was admitted to the ward, though not without an argument whether he ought to be sent to the other hospital in the area, which was on casualty take-in that day. The fracture was duly pinned. The ward sister told him he was the third in six years to break a bone slipping on the floor. It seemed that the house committee's chairman had once fallen on a non-slip floor and therefore believed that a change of flooring would give the staff a false sense of safety that could lead to more accidents than before.

When leaving the ward to go home to convalesce after the pinning, the doctor slipped on the highly polished floor, fell, and broke the neck of his right femur. He was readmitted to the ward, the hospital being on casualty take-in that day. The fracture was duly pinned. The house surgeon thought the doctor's liability to breakage might be due to a metabolic bone disease, but the biochemical and other investigations were normal. Safer flooring was provided.

11. Cold Hernia

A man of 21 wanted to join a famous police force. He had a right inguinal hernia and was told that it must be cured surgically before he could be enrolled. His family doctor accordingly arranged for him to be seen at hospital. The hospital could not give him a consultation appointment until two months later. At the end of this time he was duly seen by a surgeon, and his name was put on the waiting list for admission—he was told he could expect a bed in about four to five months. After six months had gone by without word he inquired about the chances of early admission: he was told he would have to wait at least another three months as renovation of the wards was holding up non-urgent admissions.

Four more months passed without news. The patient then made more inquiries at the hospital. This time he was told he would have to wait at least three months longer as the operating theatres were being rebuilt and only emergency cases could be admitted for surgery. The three months went by and then he insisted on speaking again to the surgeon in person. The surgeon promised to look into the delay, and two months later his registrar wrote to the patient to let him know he could expect to be admitted "some time after July." This letter was written in February; it did not specify which July, or how long after July admission might be expected. As 17 months had already passed since his doctor had first got in touch with the hospital to try to arrange for the operation, the patient wrote to his Member of Parliament to see if he could have anything done to expedite the operation. Two months later the M.P. wrote back, expressing warm sympathy and assuring his constituent that searching inquiries had confirmed that everything possible had been done to hasten his progress to recovery.

July of that year came and passed, and there was still no word of a bed. His doctor reluctantly agreed to refer him, at his own request, to the surgeon as a private patient. A week after the resulting consultation, which took place promptly, the patient was admitted to a public ward in the hospital for

his herniorrhaphy. He understood that the operation was to be done by the surgeon whose consultation fee he had paid, but it was the surgeon's registrar who operated and removed his appendix, which was normal. The mistake was recognized when the registrar operated on the next patient on the list, expecting to do a right inguinal herniorrhaphy but finding no hernia and instead having to remove a kinked and fibrotic appendix.

Four days later the surgeon who had arranged the patient's admission repaired the hernia himself, and left a gauze wipe in the wound. A persistent sinus resulted, the cause of which was discovered five months later. The outcome was a large and unsightly scar, and recurrence of the hernia. A year after the first operation the patient was operated on again, by the same firm, this time successfully and without complications. He was then 24 years old, over the age limit for enrolment in the force he had wanted to join.

Touts who had heard of the patient's story from their contacts at the hospital got in touch with him, with advice to sue the surgeons and the hospital. They offered to introduce him to the necessary legal assistance, but he declined their help and let the matter rest.

Three Historical Specimens

12. Cryptococcal Mastitis

The three immediately preceding histories have interrupted my intended sequence of five cases derived from medical museums, starting with Cases 7 and 8 (respectively illustrating use and abuse of museums) and following now with accounts of three historical specimens from Charing Cross Hospital Medical School. Two of these three old specimens (this case and Case 14) were in the Cross museum under what proved to be misleading diagnoses. Both seemed poor examples of what they purported to be and accordingly had been marked for discarding. Thanks to the judicious insistence of my colleague, Dr. W. E. D. Evans, curator of the pathology museum at Charing Cross from 1953 until his death in 1964, the diagnosis was checked histologically in both cases before the fate of the specimens was decided. The results follow.

This is the case of a woman who, at the age of 50, was admitted to Charing Cross Hospital on 8 July 1894 because of a lump in one breast, first noticed two months previously (Symmers, 1967, Case 10). The breast was removed on the day of admission. The specimen, labelled "Colloid Cancer," was put in the museum. At some later time it was stained in the gross with mucicarmine, which strikingly displayed a mucinous mass, 3 cm. in diameter, on the cut surface (Fig. 5 A—see Colour Plate). When this lesion was examined histologically in 1955 (see above) it proved to be a cryptococcal granuloma (Fig. 5 B)—the first time that cryptococcal mastitis had been found in the human (its occurrence in cattle was familiar, in appropriate circles). There was no sign of any neoplasm.

It has been possible to discover that the patient died 37 years after the mastectomy, apparently of old age. The date of the mastectomy is significant. On the day before (7 July, 1894), at a meeting in Greifswald, in Pomerania, Abraham Buschke, dermatologist, and Otto Busse, pathologist, had separately presented their original accounts of the first case of cryptococcosis (torulosis, or European blastomycosis) ever to be recognized (Buschke, 1895; Busse, 1895). But for that day's difference in date we might have been able to speak of cryptococcosis as "Charing Cross disease" rather than Buschke-Busse disease. Yet the two Germans deserve the eponymous credit, for Busse had established the identity of the new disease within a month of their patient's admission to hospital—it took us 61 years, which is probably a record in procrastination before issuing the final report on a biopsy specimen (and even then I had all but thrown the material away without having sections cut).

13. Madura Foot of the Hand

Madura foot, or mycetoma, or maduramycosis, has been recorded in India since ancient times. It became the main interest of a remarkable Englishman, Henry Vandyke Carter (not to be confused with his contemporary, Henry John Carter, another English doctor of medicine who, also working in India, contributed greatly to the advancement of the natural and applied sciences in the nineteenth century).

Henry Vandyke Carter was born to be an artist, or so his mother believed, for it was to further this intention that she chose his middle name (a sexton is reputed to have misspelt it when making the entry in the parish register, Mrs. Carter having intended Van Dyck). His father and brother were well-known artists by profession. He himself, by profession a surgeon in the Indian Service, is yet the best regarded artist of the three, for he was the first great British medical illustrator of modern times. He studied medicine in University College, London, walked the wards of St. George's Hospital, qualified in 1852, when 21, and became M.D. (Lond.) four years later. Before he was 26 Carter's artistic genius and exquisite draughtsmanship had enabled his friend, Henry Gray, of St. George's, to realize his *Anatomy*, surely the best-known textbook in all medicine: Carter, having prepared many of the dissections, made all the drawings from which the 363 illustrations of the first edition, published in 1858, were engraved. It was in that year, 1858, that Carter joined the Bombay Medical Service. He finally left India in 1887, his premature retirement being due to a chest complaint, of which he died 10 years later. He had achieved much in his years in India: in the present context it is his work on mycetoma that is relevant.

Vandyke Carter's contributions on mycetoma are many. In sum, by 1860 he had already recognized that the disease was caused by fungi (Carter, 1861a); in 1861 he coined the name mycetoma (Carter, 1861b); and he prepared a monograph on the disease, published in 1874, with fine coloured lithographs from his own pictures, a book that is a medical classic (Carter, 1874).

At various times Vandyke Carter presented specimens of mycetoma to medical museums in the United Kingdom. In 1962, with patient and generous help from their curators, I was able to arrange a search of all the museums in the British Isles that might conceivably be the present quarters of any of Carter's material. A number of old mycetomas of no longer traceable origin turned up during this survey, but none of these tallied with Carter's descriptions. Only one specimen that he described is still known generally: it is in the pathological collection in the Royal Army Medical College, Millbank, London, and, thanks to Brigadier H. C. Jeffrey, I have had the privilege of examining it in my laboratory. The specimen is an amputated foot, infected by a madurella. It has been rephotographed, x-rayed, and re-examined histologically—the illustrations will be published elsewhere (Symmers, 1970). I wonder if Carter, who died in 1897, two years after Röntgen's discovery, ever saw a "skiagraph" of a mycetoma—probably not.

One of the illustrations in Carter's book shows a mycetoma of a hand (Carter, 1874, Plate 3). Because of the comparative rarity of involvement of the hand, I was especially keen to track down such a specimen from among Carter's collection. None of the very few mycetomas of the hand that writing to museum curators brought to light had any connexion with Carter. My search seemed to be vain. Some time later, however, I checked the replies once more against the list of all the medical museums in the British Isles. It turned out that one museum had not in fact been approached in this quest—the Pathology Museum of Charing Cross Medical School. At the time I was acting as curator: I knew there was no mycetoma of a hand on our shelves, but I had not considered the possibility that one might be stored out of sight. The outcome was the finding of a much macerated and very imper-

fect specimen, long stowed in a forgotten cupboard. The specimen is recorded in an old laboratory notebook—

"Received of Surgeon-Major H. V. Carter, 1873: in spirituous *Liquor Conserv.*, a fungus hand from India (the same *delin.* H. V. C. in a Plate to his *op.* 'On the Mycetoma', presently setting in London)."

This reference to the illustration in Carter's monograph seems to make it sure that the sought for specimen had at last been found, and found where it could have been looked for first. It was by then in such poor state that it would not make a worth-while illustration. Satisfactory histological staining has not been possible, and even phase contrast microscopy and other means have not shown any recognizable fungal remains.

14. Primary Amoebic Meningoencephalitis

The last of this historical trio has recently been described in this journal and need not be repeated here (Symmers, 1969, Case 1). Just this brief reference is necessary, to introduce the case that follows next.

15. Another Case of Protozoal Encephalopathy

The case just mentioned was histologically typical of meningoencephalitis caused by naegleria and similar free-living amoebae. Its demonstration at a club meeting led to the present case being demonstrated to the club at its next session as *Entamoeba histolytica* encephalitis. But the cells that had been interpreted as entamoebae turned out to be degenerate Purkinje cells, and the small blood vessels in the brain were filled with red cells heavily parasitized by *Plasmodium falciparum* (Fig. 6). It was quite embarrassing.

The patient had been found unconscious in a doctor's waiting room, smelling strongly of alcohol. He was immediately moved to a hospital, where sugar was found in his urine and he was given insulin and glucose, diabetes complicated by alcoholic coma being suspected. He died while his stomach was being washed out. The blood sugar proved to be within normal limits. The part-time pathologist who did the necropsy was not satisfied that there was sufficient explanation of the patient's death until he found the supposed amoebae in the section of cerebellum. History does not relate what, if anything, was observed during the necropsy that might have explained the presence of entamoebae in the brain.

Later it was learnt that the patient had come back from a business trip in central Africa a few days before his death. His associates said that he was known to have thought antimalarial drugs unnecessary for tough, healthy men.

16. "Has She Been Taking the Pills?"

A white businessman and his wife came from southern Africa to Britain on a short visit. Eight days after arriving the wife felt ill and went early to bed. Next morning she could not be roused and a retired obstetrician, living next door, was asked to help. He knew that the couple had recently come from Africa. After examining the patient he asked her husband, "Has she been taking her pills?" The man replied, "Yes, indeed she has—so that's what it is—we were never very happy about them, all these stories of thrombosis: you think it's a stroke, then, isn't that it?"—and he produced the pack of his wife's oral contraceptive for the doctor to see.

In fact, what the obstetrician wanted to know was whether the couple, whose flight to Europe had included an unscheduled overnight stay in Kano, had been taking an antimalarial drug. They hadn't, and his suspicion of cerebral malaria was confirmed in the laboratory. She recovered.

17. "Have You Been Taking the Pill?"

A young Englishwoman was found unconscious in bed in the hostel of the North American hospital where she worked. When she came out of the coma she was hemiplegic. The direct question disclosed that she had been taking a high-oestrogen contraceptive pill regularly for three years: it was consequently assumed, very possibly correctly, that this had caused cerebral thrombosis. Later it was learnt that she had gone to the staff physician six weeks before the stroke because of thrombosis of a subcutaneous vein of one calf: the doctor had not asked if she was on "the pill," and as she was unaware of any supposed association between taking the pill and thrombosis she had continued to take it regularly.

Steady improvement in her condition enabled her to return to her home in Britain, though not before her family's savings had been exhausted by the expense of being ill and uninsured in America. At home she continued to progress well for some weeks. Then, four months after the stroke, she began to get slowly worse again. The clinical findings suggested the possibility of a tumour or abscess in the region that had been involved in the stroke. Aspiration of the area at craniotomy produced a small amount of pus containing a brown fungus. The abscess was treated conservatively and a course of amphotericin B was given intravenously. The patient has made a practically complete recovery.

Cultures identified the fungus as *Cladosporium bantianum*, the usual cause of chromomycosis of the central nervous system. There is a little evidence that infection of the brain by this organism tends to occur as a complication of infarction (Symmers, 1963), maybe taking place in the course of a transient fungaemia (though how such a fungaemia arises is itself a mystery). It does not follow from the eventual discovery of a cladosporial infection in this patient's case that her initial stroke was not simply ischaemic in origin. Indeed, its likeliest cause was local thrombosis, perhaps attributable to the oral contraceptive.

18. "How Many Have You Been Taking?"

A student nurse aged 19 fainted while on duty. She was found to have an iron-deficiency anaemia with under 9 g. of haemoglobin per 100 ml. of blood. She said that for a year she had been losing substantially excessive amounts of blood during her periods, which, while regular at 28-day intervals, were lasting six to eight days. Uterine curettage produced unexpectedly bulky, pale tissue that sections showed to be uniformly of the appearance illustrated in Fig. 7. This picture was interpreted as a very well differentiated primary papillary endometrial adenocarcinoma. The gynaecologist considered the findings to demand hysterectomy.

As the patient was under age to give legally effective consent to an operation her parents were sent for and the situation was explained to them. The mother said she would like to talk with her daughter alone before any decision was made. A few minutes later she returned to the gynaecologist and asked him if it was possible that the pathologists' findings could be explained by the fact that the patient had been taking a contraceptive pill for almost 20 months. The surgeon thought it very unlikely that this could be relevant, but he was puzzled—he had anatomical knowledge of the girl's virginity and he wondered why she should have been on an oral contraceptive for so long, and why she hadn't told him about it. So he talked with her again himself.

She explained that she had wanted to be sure of avoiding

an unplanned pregnancy—she had had no clear idea how conception occurs and thought that being kissed might alone be enough. When standing in for the staff nurse at the hospital's family-planning clinic she had had access to supplies of the tablets. The gynaecologist, being nominally in charge of the clinic, was nonplussed by this information. It occurred to him, on the spur of the moment, however, to ask her, "How many pills have you been taking?" "Six a day," she replied, "sometimes more—but, of course, none at all one week in four." It seems that she had believed that if a married woman took one pill a day to prevent pregnancy, an unmarried woman would be wise to take more, and that six pills a day would be six times surer.

It was decided not to operate. The girl undertook not to take the pills again. She has had no more trouble. She completed her nursing training and married a gynaecological registrar. They had their first baby five years after the events related here. So, presumably, it was all an extreme endometrial hyperplasia. Looking at the original of Fig. 7 I still believe I should regard the picture as carcinomatous—but now I hope I shall always remember to ask if the patient is on "the pill," and, "How many?"

Conclusion

There are so many *Curiosa* and *Exotica* in a pathologist's notebooks that it is difficult to choose which to present on an occasion such as this. It will take a book or two to contain the others (Symmers, 1970). A collection like this owes its existence and growth to the understanding and good will of the doctors and the patients, and often others, who have allowed and encouraged their experiences being put on paper, even if they prefer not to be named or too closely identified. The experiences are theirs rather than mine; but I have been able to share in them, sometimes indirectly, oftener personally, and I am grateful. And I am grateful to the Section of Pathology of the Royal Society of Medicine for the honour of having this presidential occasion to share a selection of these histories with so many who are as fascinated by the world of medicine as I am, imperfect as it is and yet so worth while.

The Honorary Editors of the *Proceedings of the Royal Society of Medicine* have kindly permitted publication of this address here. I am grateful to Mr. R. S. Barnett for his invaluable help with the photography.

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FIG. 1.—Case 1. Brain in anthrax meningitis. Watercolour by the late Professor H. R. Dean, sketched in the post-mortem room of the Union Infirmary, Belfast, in 1907. (Agfacolor.)

Fig. 5a

FIG. 5.—Case 12. Cryptococcal mastitis. (a) The museum specimen had been stained in the gross with mucicarmine, which coloured the lesion because of the intense mucicarmineophilia of the mucoid capsular material secreted by the fungi. It was the mucoid appearance of the lesion that had led to it being so long regarded as a primary mucoid ("colloid") carcinoma. The specimen has been illustrated before, in black and white (Symmers, 1966a), but only colour reproduction does justice to it. (b) Paraffin sections of the specimen were stained with mucicarmine. This photograph of a typical field in one of these sections shows the characteristic mucicarmineophilia of the fungal cells in the necrotic tissue. *Cryptococcus neoformans* is alone among pathogenic fungi in having this affinity for mucicarmine, which can be very helpful in identifying it. (Mayer's mucicarmine, Mayer's haemalum and tartrazine. $\times 600$.) (Agfacolor.)

Fig. 5b

Fig. 3

Fig. 2

Fig. 4

FIG. 2.—Case 2. Foreign body that was impacted in Meckel's diverticulum—a block of Perspex with three human body lice displayed within it. The block measures 1.5 cm. along its longer side.

FIG. 3.—Case 5. Leprous lymphadenitis. The arrangement and appearances of the large, pale, rounded histiocytes are characteristic of the lymphadenopathy accompanying the unusual systemic form of leprosy that affected this patient. Globoi can be seen in some of the cells in the field illustrated; in Ziehl-Neelsen preparations lepra bacilli were found to be very abundant. (Haematoxylin and eosin, $\times 280$.)

FIG. 4.—Case 8. Xenosomatogenic polykaryomegalomacrophage reaction to a fragment of slippery elm bark (the coarsely mesh-like structure in the upper central part of the field). (Haematoxylin and eosin, $\times 280$.)

FIG. 6.—Case 15. The four largest cells in this field of the cerebellum are Purkinje cells showing various degrees of degeneration—it was such cells that were mistaken for *Entamoeba histolytica* (see text). The capillaries are packed with red cells parasitized by *Plasmodium falciparum*: the picture is typical of cerebral malaria. (Haematoxylin and eosin, $\times 450$.)

FIG. 7.—Case 18. This field is representative of the picture that was interpreted as a well-differentiated primary papillary adenocarcinoma of the endometrium (see text). In the light of the clinical course it must presumably be reassessed as a very pronounced hyperplasia. (Haematoxylin and eosin, $\times 100$.)

Fig. 6

Fig. 7