change and evidence of chronic venous congestion. Kidney: evidence of toxaemia, with cloudy swelling of tubular epithelium. Spleen: congestion of sinusoids; Malpighian corpuscles were small, with relative deficiency of lymphocytes. Hilar lymph nodes: reactive hyperplasia and evidence of early pyogenic infection. The suprarenals were normal (right 6.6 g., left 6.7 g.). The pituitary was also normal.

Two similar cases are mentioned in the 1953 annual report of the rheumatological department of the Royal Free Hospital. These were both on long-term cortisone; they remained symptomless until they became explosively ill, and in spite of treatment died a few hours later. These cases will be reported fully in due course.

### Comment

The two cases reported display the well-known masking qualities of A.C.T.H. and cortisone over severe bacterial infections. In the light of experimental knowledge of dissemination of infection by these drugs, the second case is of interest because of the short duration of A.C.T.H. treatment and also the low dosage of drug given—20 mg. of gel daily. The absence of gross histological change in the adrenal and pituitary glands, using only routine staining methods, is noted.

The practical implication of patients on long-term cortisone is of most concern to the general practitioner, on whom the ultimate supervision of the patient's health depends. Although the incidence of pneumonia in patients on long-term cortisone is relatively low, its occurrence is, in our limited experience, grave and exceedingly difficult to diagnose early enough for treatment to be satisfactory.

The problem of diagnosis can at this stage only rest upon constant clinical examination at relatively short intervals, at the most a week.

The problem of treatment and general management is as yet unresolved, for in the light of present knowledge it would seem justifiable to institute antibiotic therapy at the earliest symptoms or sign of infection.

### Summary

Two cases of fulminating pneumonia in patients undergoing hormone therapy for the control of an exacerbation of rheumatoid arthritis are described.

Both cases display the well-known masking effect of cortisone and A.C.T.H. over severe bacterial infection.

In the first case death occurred during prolonged cortisone therapy. In the second case death occurred a week after commencement of A.C.T.H. therapy.

The problem of diagnosis and treatment is discussed.

I am indebted to Dr. G. D. Kersley for his help and advice in preparing this record and for allowing me to report these two cases; also to Dr. H. J. Gibson for furnishing the post-mortem and histological reports.

REFERENCES

*British Medical Journal*, 1954, 1, 381.
*Lancet*, 1951, 1, 949.

In his Annual Report for 1953 Dr. Kenneth Fraser, county medical officer of Cumberland, describes a survey of all the spastic children in the county. Fourteen of these were being educated at primary schools, three were classified as ineducable, four were in special schools, and four were being considered for admission to special schools. Of the children under 5 years of age, only three were discovered with a serious degree of spasticity. Eight children in all were classified as being seriously disabled owing to spasticity, and three of these had been affected by erythroblastosis foetalis. Dr. Fraser, commenting on the importance of performing blood tests on expectant mothers, adds: "I hope the significance of this will not be overlooked by those concerned."

# Medical Memoranda

## Intussusception at 70 Hours

I would like to record this case as that of one of the youngest babies to have an intussusception. It is of interest in demonstrating some of the odd symptoms one may encounter when dealing with cases of intestinal obstruction of the newborn.

### CASE REPORT

The patient, a male child of healthy parents, was normally delivered. His blood group was A Rh-positive and the W.R. negative. At birth he was quite active and appeared to be normal. There was some bruising of both feet and one hand that was not due to trauma. Thirty hours after birth a dark stool of meconium plus melaena was passed, as were similar stools at 48 hours. At this period he sucked vigorously, but regurgitated green fluid. A tentative diagnosis of haemorrhagic disease of the newborn was made and 10 mg. of "synkavit" was given. At 58 hours he had another melaena stool and vomited some green fluid, and his general condition began to deteriorate.

He was admitted to the Newcastle-upon-Tyne Babies Hospital at 60 hours and was found to have petechial haemorrhages of the trunk, face, hands, and feet. He was observed for two hours, and during this period he vomited bile-stained fluid and his general condition became much worse. He was therefore transferred to the children's department of the Newcastle-upon-Tyne General Hospital as a possible case of duodenal atresia. He was then 66 hours old, weighed 6 lb. (2.7 kg.), and had a haemoglobin of 88%. He was dehydrated and pale. He had small subcutaneous haemorrhages on the face and bruising of the hands and feet. He continued to vomit greenish fluid. The upper abdomen was distended and no mass could be felt.

An *x*-ray film was taken, and the radiologist reported: "There was no gas distal to the first part of the duodenum, indicating a complete obstruction. Barium enema showed a normal colon and excluded malrotation. The lesion is most likely to be an atresia."

In view of this a provisional diagnosis of duodenal atresia and haemorrhagic disease of the newborn was made, and he was prepared for operation. A blood transfusion was started and gastric aspiration was carried out. At this stage he passed three small stools of fresh blood.

At 77 hours I operated. The abdomen was opened through a right paramedian incision. On opening the peritoneal cavity it was immediately obvious that one was dealing with a high intussusception. Examination showed it to begin about 10 in. (25 cm.) from the duodeno-jejunal junction and to be about 12 in. (30 cm.) long. Reduction was started in the usual manner, but the emerging bowel was seen to be gangrenous and the intussuscipiens began to split. I resected the affected bowel, closed both ends, and did a side-to-side anastomosis, using No. 000 catgut throughout. The baby stood the operation well and made an uneventful recovery.

The post-operative regime was as follows. Gastric aspiration was done hourly and the I.V. drip was continued. Twenty-four hours after operation feeds of 2 dr. (7 ml.) of sterile water were given every two hours, aspiration being carried out before the feed. Glucose water was given in gradually increasing amounts for 48 hours until 96 hours after the operation, when the amount being aspirated was less than the amount taken. A stool containing bile was passed at 72 hours. Gastric aspiration was continued at lengthening intervals until seven days after the operation, when only 2 oz. (57 ml.) had been aspirated in the previous 12 hours. He had full-strength half-cream milk from the fifth day and was on to three-hourly feeds after six days. Penicillin and streptomycin were given for ten days.

He was discharged from hospital on the twelfth day. His weight was 6 lb. 12 oz. (3.1 kg.). The wound was soundly healed. When I saw him a month after his operation he was quite fit and well.

The specimen was reported on by the pathologist : "A piece of extremely haemorrhagic small intestine 18 cm. in length, with the remains of an intussusception at one end. Histology of the remains of the intussusception reveals complete gangrene of intussusception with much haemorrhage. Remainder of bowel wall showed severe oedema and much submucous and mucosal haemorrhage."

### COMMENT

The interesting features of the case are the association of haemorrhagic disease of the newborn with an intussusception. One may speculate whether the former was the cause of the latter and whether the actual onset of the intussusception had occurred *in utero*.

Having done a number of resections in older infants, I am convinced that the most satisfactory result is obtained (when resection of the bowel is required) by immediate side-to-side anastomosis. Especially is this so when the gangrenous bowel is small intestine, as is usually the case. The extra time necessary to complete the anastomosis is negligible, and the baby is spared the risks of a fistula and a second operation.

Nurses skilled and experienced in this type of work are a *sine qua non*, and I must record my thanks to the excellent nursing of the baby at the Newcastle-upon-Tyne General Hospital.

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## Carcinoma of Body of Uterus Found on Endometrial Biopsy

Endometrial biopsy is used as a diagnostic procedure in the study of infertility to obtain evidence of ovulation by the demonstration of secretory activity of the endometrium. Only a small fragment of tissue is obtained, but the investigation can be carried out in the out-patient department without an anaesthetic—a great advantage over a full curettage.

During the past two years 489 endometrial biopsies have been carried out, and in two cases the presence of an unsuspected carcinoma of the body of the uterus was revealed. In both cases the patient attended the fertility clinic complaining only of her failure to conceive and had no symptoms suggestive of malignant disease. Although tuberculous endometritis is found in about 2 to 5% of infertile patients with no other complaint, there has been little reference to the accidental discovery of an endometrial carcinoma.

These cases are worth recording, since carcinoma of the body of the uterus is usually associated with post-menopausal bleeding or irregular vaginal bleeding about the time of the menopause.

### CASE 1

The patient, aged 41, had been married for only one year and was anxious to become pregnant. Her menstrual cycle was regular, three days' loss every twenty-eight days ; she had no intermenstrual bleeding, but noticed a vaginal discharge. She had suffered from mild rheumatoid arthritis for ten years, but otherwise her general health was good. She had had no other serious illnesses or operations and no previous pregnancies.

On general examination no abnormality was found apart from rheumatoid arthritis of the hands, wrists, and feet. On pelvic examination the only abnormality found was a cervical erosion ; the uterus was anteverted, mobile, and of normal size. The erosion was treated, and a hysterosalpingogram was carried out in November, 1950. This showed that both tubes were patent and the cavity of the uterus appeared to be normal. The patient attended the clinic at irregular intervals, and the first endometrial biopsy was taken in July, 1951, eight months after the salpingogram. The result of this biopsy was surprising, for it showed fragments of an adenocarcinoma of the body of the uterus. On closer questioning after admission she said that she had noticed very slight vaginal bleeding after each examination at the clinic, but had paid no attention to it.

A preliminary dilatation and curettage was performed which produced a small quantity of necrotic friable malignant tissue. The cervix was sutured and total hysterectomy and bilateral salpingo-oophorectomy were carried out at once. At operation the pelvic organs looked quite normal. On opening the uterus afterwards, a small papilliferous area about the size of a pea was found near the left cornu, and it was obviously by chance that a piece of the growth had been included in the endometrial biopsy. Section of the uterus showed a well-differentiated adenocarcinoma with very little invasion of the myometrium. No secondaries were found in the ovaries.

The patient has been followed up regularly since the operation and there is no evidence of recurrence.

### CASE 2

This patient was only 28 years old, and first attended the fertility clinic in September, 1952. She had been married for nine years without using contraceptives and had not become pregnant. She had no complaints other than infertility. Her menstrual cycle was regular, four or five days' loss every twenty-eight days, and she had no intermenstrual bleeding or discharge. She had had no serious illnesses or operations, but had been investigated at another hospital for infertility in 1946 and was told that her tubes were patent.

The patient was a healthy-looking young woman and no abnormality was found on general or pelvic examination. There was no abnormal vaginal discharge, the cervix was healthy, and the uterus was of normal size, anteverted, and mobile. Insufflation was carried out at her first attendance and the tubes were found to be patent. Six weeks later an endometrial biopsy was carried out on the twenty-fifth day of the cycle, and examination of this biopsy material showed a well-differentiated adenocarcinoma of the body of the uterus. Some persuasion was necessary before she would consent to come into hospital. Her object in attending the clinic was to start a family, and it seemed strange that we should seek permission for a hysterectomy so soon after her first attendance.

A preliminary curettage produced necrotic friable malignant tissue which left no doubt about the diagnosis. The cervix was sutured and total hysterectomy, with removal of the appendages, was carried out at once. Again the pelvic organs appeared normal at operation. However, on opening the uterus after it had been removed, an extensive carcinoma encircling the uterine cavity was found. Almost any endometrial biopsy would have been certain to include some of the growth. Section showed a moderately well differentiated adenocarcinoma with some penetration of the myometrium. No secondary deposits were found in the ovaries. A course of deep *x*-ray therapy was given post-operatively to the pelvis and the patient has remained well so far.

### COMMENT

It is not suggested that the endometrial carcinoma was the primary factor in the infertility of either of these cases. The first patient had reached a comparatively infertile age, while the second patient could hardly have had a carcinoma present for the nine years of her marriage. However, the accidental discovery of these malignant conditions leads to conjecture upon the length of time that an endometrial carcinoma may be present without producing abnormal vaginal bleeding.