Case 6.—A woman aged 56 was seen on March 4, 1948. She had a history of carcinoma of the cervix treated with radium three years before. For the past year she had had severe intractable cystitis with haematuria at times. When cystoscoped as an out-patient there was so much pus that the bladder wall could not be seen. She was admitted to hospital, and after a week's treatment was cystoscoped again. There was a large ulcer of the bladder base, which appeared malignant. As her general condition was good and she was getting so much trouble from the cystitis I decided to do an exploratory operation and see if there was any chance of a radical removal. At the firststage operation on May 18, 1948, a dense mass of scar tissue was seen round the cervix, including both ovaries, and adherent to the rectum behind and the bladder base in front. At the second stage, on June 8, cystectomy and hysterectomy were performed. The operation was very difficult; the only pleasant feature was not having to worry about the lower ureters in doing the complete hysterectomy. Repair of the lower peritoneum was also difficult after such a wide excision, and was no doubt responsible for the unusual degree of abdominal discomfort and distension which the patient had after the second stage. The pathological report stated: "Cervix: large white mass in cervical wall consists of dense and partially hyalinized fibrous tissue. Both ovaries replaced by a compact mass of dense fibrous tissue. Bladder: the transitional epithelium is somewhat heaped up in places but there is no evidence of invasion. The subepithelial tissue is oedematous and there is a considerable amount of round-celled infiltration of the plasmacell type, the result of chronic irritation." Although no malignant cells were found I think this was at least a precancerous condition. In November, 1948, she was quite well except for attacks of very severe constipation.

FEB. 5, 1949

### **Summary**

Six cases with malignant or pre-malignant conditions of the bladder are described. In all the cases transplantation of the ureters was carried out by the method of implanting the ureters in continuity, as a first stage, followed by cystectomy. There was no operative mortality.

# Medical Memoranda

# Cancrum Oris Among African Natives

The classical description of cancrum oris as given by Christian (1938) is that of a rapidly progressive gangrenous stomatitis in a child already debilitated by another disease, usually one of the exanthemata. Varying treatments are advised, but the prognosis is regarded as hopeless, though Thomson and Findlay (1933) state that occasional recovery does take place. Tidy (1939) states that death is almost invariable. All authorities seem agreed that the probable cause is a combination of organisms similar to that found in Vincent's angina—i.e., spirochaetes and fusiform bacilli. The fact is stressed by all writers that cancrum oris is essentially a rare disease, though I have been unable to find any actual incidence figures.

Observations in Africa.—During the years spent as student, house-surgeon, and general practitioner I did not encounter a single case of cancrum oris in Britain, despite the fact that the whole of this period was spent in a highly industrialized area where the children were often poorly nourished and often lived in unhygienic conditions. In contrast, in less than three years in the Serenje district of North Rhodesia we have come across no fewer than five cases. In the years 1945-7 cancrum oris patients constituted 0.7% of admissions. In no case has there been a previous history of a specific illness. It would seem, therefore, that the main aetiological factors responsible for this comparatively high incidence are the bad diet of the African native and his unhygienic mode of life. It is also worthy of note that the probable causal organisms of cancrum oris are similar to those which are almost invariably found in tropical ulcer, a disease that is always present among the people of this district. Of the five cases seen three were fatal. Of the two who recovered one was treated by extensive resection of the gangrenous area, followed by plastic repair; the other was

treated with penicillin, and this case is detailed below. In no instance did the clinical appearance or progress of the disease differ from the usual description.

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Penicillin Therapy.—As favourable results were obtained by penicillin therapy in cases of Vincent's angina it seemed natural to hope that similar results might follow the use of penicillin in cases of cancrum oris. The rarity of the disease, however, seems to have made it difficult to procure reliable information. Fish (1946) was unable to quote any cases. However, a very detailed case history has since been published by Shrand (1947). The case history below is published in the hope that it may add to the volume of information regarding the treatment of one of the most terrible of all children's diseases. It is regretted that circumstances made it impossible to produce more than a purely clinical case history.

#### CASE HISTORY

A female MuLala child aged about 2 years was admitted to Chitambo Hospital from an outlying dispensary on Oct. 3, 1947. On clinical examination a typical early cancrum oris was seen. The angle of the lip was ulcerated and further investigation showed the ulcer extending back on to the gum in the right canine fossa. There was a well-marked area of brawny induration of the right cheek, extending back to the anterior border of the masseter myscle. Temperature 100.4° F. (38° C.). No history of previous illness could be elicited from the parents.

The following day a brother of the above, a male MuLala child of about 4 years, was admitted with a very advanced cancrum oris. The lips, nose, and most of the right cheek had disappeared and been replaced by a single large sloughing ulcer. Temperature 98.4° F. (36.9° C.). This patient was obviously moribund, and died within twenty-four hours of admission. The virulence of the disease process may be judged from the statement of the parents that the first sign of disease in the boy had occurred only five days previously and in the girl three days previously.

In the case of the female child palliative treatment was adopted. The ulcer was swabbed four-hourly with a strong solution of potassium permanganate, and an attempt was made to maintain the child's resistance by feeding it on thin gruel. Despite these measures the ulceration continued to progress. On Oct. 10 a supply of penicillin became available and treatment with it was instituted, 10,000 units in aqueous solution being administered intramuscularly every three hours. The swabbing with potassium permanganate was continued. After the third injection treatment was interrupted for twelve hours owing to objection from the parents for superstitious reasons. Injections were then resumed, and were continued until 500,000 units had been given.

Results were apparent after twenty-four hours. The brawny induration of the cheek began to soften and the line of demarcation became much less apparent to palpation. After thirty-six hours the sloughs of the ulcerated area began to separate, leaving a granulating surface. After three days of treatment all signs of infiltration of the surrounding tissues had vanished and the ulcer presented a clean and obviously healing surface. Recovery was uninterrupted, and the child was discharged on Oct. 27.

# COMMENT

The above case history is interesting in that it records two cases in one family at the same time. There may have been a common source of infection, but it is more probable that the male child, with a highly virulent disease, infected the other. This may indicate a degree of infectivity that does not seem to have been stressed in the literature. This case also indicates that cancrum oris should join the group of conditions classed as highly responsive to penicillin therapy. It was astonishing to see a condition so notoriously fatal, and which had already killed one member of the family, respond so rapidly to penicillin, supported only by the simplest of local measures.

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On St. Thomas's Day, Dec. 21, Major-General R. J. Blackham, A.M.S.(ret.), and Dr. Arthur Westerman were re-elected members of the Court of Common Council, Corporation of London. General Blackham was for many years the only representative of the medical profession on the Common Council until 1941, when he was joined by Dr. Westerman, the medical officer of the Charterhouse.