Basic therapeutic régime

Fluid intake and output is accurately charted, and during the phase of anuria or oliguria oral fluids should be restricted to about 600 ml. per day. The patient is encouraged to take a diet such as sugared rice, buttered toast, sponge cake, etc., and intravenous or intragastric therapy is avoided. Protein anabolic drugs such as nilivar are useful in preventing the destruction of the patient’s own protein. Daily estimations of the serum electrolytes should be carried out and if hyperkalaemia is suspected an electrocardiogram will confirm any cardiac irregularity. There are several methods available to control potassium intoxication, the most effective being the use of ion-exchange resin enemas. Extracorporeal haemodialysis is performed when the clinician thinks it necessary.

SUMMARY

With the establishment of the artificial kidney as an essential part of the management of acute renal failure, it would seem that the Army Medical Services should have available a renal insufficiency unit which could be rapidly mobilised in time of war.

REFERENCES


AN UNUSUAL CASE OF ACTINOMYCOSIS

By
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It seems wrong in this type of case to state bluntly the diagnosis at the beginning of the paper. A story which is complicated should unfold itself gradually, and the features and progress of this case are therefore described as they occurred.

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Case Report

The patient was a man of 47 who had been sent back from Germany, and was admitted to The Queen Alexandra Military Hospital in February, 1959. Four months previously he began to complain of vague abdominal symptoms with epigastric discomfort after meals. It soon became obvious to his wife that he was losing weight steadily. His normal weight was 11½ stone, but on admission he was 8 stone 10 pounds.

In December, 1958, he had twelve small hæmoptyses, but he never had any other chest symptoms. In the same month he began to note some nocturnal frequency. In January, 1959, he started sweating at night, and while an in-patient he had a low-grade fever.

On admission, his chief complaint was persistent pain in his left flank. This had been present for three weeks and had gradually become more severe. He felt weak and feverish. His appetite was poor and he vomited readily. On direct questioning there was nothing relevant in his past history, except that at the end of December, 1958, he had a loose tooth removed.

On examination, he was a pale, anxious, chronically ill man, with marked signs of wasting. His teeth were in a poor state. He had no chest signs, clubbing or lymphadenopathy. He had marked tenderness and local guarding in the left flank, and extension of the left hip increased the pain on this side. The liver was enlarged three finger breadths on percussion. There were no other abnormal signs.

Investigations on admission

Hæmoglobin 74 per cent. Total white cell count 14,100 per cu. mm.; polymorphs 68 per cent. E.S.R. 32 mm. per hour (corrected Wintrobe). M.S.U. Numerous pus cells, a few red cells and a trace of protein. Culture negative. Liver function tests were all normal except for a raised alkali phosphatase of 50 King-Armstrong units. Sputum negative for Mycobacterium tuberculosis on culture and guinea pig inoculation.

Mantoux test positive to 1/1,000 dilution (100 units).

Radiological findings

P.A. chest radiograph showed a right mid-zone lesion, which on the lateral film was in the anterior segment of the right upper lobe. Examination of an old P.A. film taken in December, 1956, showed a much smaller opacity in the same region. An intravenous pyelogram done previously at the B.M.H. Hostert showed impaired function of the left kidney, and retrograde pyelogram demonstrated an abnormal pattern. Barium meal and enema were also both normal.

No growth was seen at bronchoscopy, and a "blind" mucosal biopsy was normal.

Progress

Initially it was felt that the lung opacity was a bronchial carcinoma, and that his left flank tenderness was possibly due to a perinephric abscess. At explora-
ition, the left kidney was adherent locally and necrotic tissue was bursting through its capsule. The macroscopic appearance at the time suggested a hypernephroma. It was therefore with great surprise and relief that the diagnosis of actinomycosis was later made by examining material from the drainage wound. Subsequent anaerobic culture revealed a growth with the typical morphology and biochemical reactions of *Actinomyces bovis*.

He responded dramatically to an initial dose of one mega unit of soluble penicillin b.d. and in a matter of a few days he began to gain strength. However, the pulmonary opacity persisted and the dosage of penicillin was therefore increased to three mega units twice a day.

Because it was felt that his teeth could well have been the source of his fungal infection, a dental clearance was performed. All nine teeth were cultured, but with negative results.

Early in May, 1959, he had a sudden attack of intense abdominal pain and rigidity. Rupture of an actinomycotic liver abscess was feared, but at operation all that was found was some bile-stained fluid in the peritoneal cavity, and eight gall stones were removed. Cholecystectomy was later performed.

He had a total of 1,000 mega units of soluble penicillin over a seven months period, and he was then transferred to the Brompton Hospital. In September, 1959, an anterior segmental resection of the upper lobe of the right lung was performed, and the persistent pulmonary lesion was found to be a caseating tuberculous mass. In addition he had scattered nodules throughout the specimen, and these on further serial section proved to be micro-abscesses due to actinomycosis.

He was therefore placed on all three anti-tuberculosis drugs—streptomycin, P.A.S. and I.N.A.H. He returned to work in February, 1960, and in May his weight had increased to 11 stone 6 pounds.

**DISCUSSION**

Renal actinomycosis is extremely rare. Thus, Kimball & Haining (1933) reported only five cases of actinomycosis with renal involvement in 7,000 autopsies performed in the preceding 15 years at the Los Angeles County General Hospital. In Foulerton's (1913) earlier series, taken from seven London teaching hospitals from 1902 to 1912, there was only one case with renal actinomycosis.

The literature reveals a few cases of so-called primary renal actinomycosis (Cohen, 1943; Kindall, 1934a, b; Moore & Tapper, 1935; Polk, 1942, and Abbott, 1924). The earliest and most notable was described by Israel in 1901, and this patient was alive and well eleven years after nephrectomy. However, the systemic nature of the disease has been stressed by many authors (Cumming & Nelson, 1929; Zachary Cope, 1952; Hunt & Mayo, 1930a, b) and this case also emphasises this point. For though the left kidney was chiefly affected, careful histological examination also revealed actinomycotic micro-abscesses in the lung tissue removed.

The literature reveals a number of clinical features which are often seen in renal actinomycosis. Firstly the general symptoms such as weakness, weight
An Unusual Case of Actinomycosis

loss and febrile sweats with anaemia and leucocytosis precede the local signs. The important local sign is loin and flank tenderness and Bevan (1923) describes “wooden-like infiltration” of the lateral abdominal wall as a later feature. Occasionally a tender mass may be felt which suggests a perinephric abscess. Unlike tuberculosis of the renal tract, frequency of micturition is unusual. However, examination of the urine will often show pus cells, a few red cells and a trace of protein. Pinner (1922) and Beregoff (1929) were able to make a firm diagnosis by finding mycelia of Actinomyces bovis in the urine. However, this is extremely unusual.

Intravenous and retrograde pyelography is frequently abnormal on the affected side, but this only confirms the presence of renal pathology, and may wrongly suggest a renal tumour.

The appearance of the kidney at operation may suggest a hypernephroma (Cumming & Nelson, 1929). Frank pus is unusual, but marked adherence of the kidney to local structures is common and this often renders nephrectomy impossible. Post-operative fistula formation is a strongly suggestive feature, and many weeks may elapse before the true diagnosis is made by examining material from the discharge.

In the pre-penicillin era, actinomycosis of the kidney and other deep viscera carried a sinister prognosis. If nephrectomy was technically impossible the patient usually died within a year. Potassium iodide and local irradiation were sometimes beneficial. Later, when the early sulphonamides were used, the first real cures were claimed. One of the earliest of these was a case of actinomycosis and fistula formation following appendicectomy, which was successfully treated with sulphanilamide. Interestingly enough this case was reported by Oliver Walker (1938) at The Queen Alexandra Military Hospital.

SUMMARY

This paper describes an unusual case of actinomycosis with predominant renal involvement. Coincident pulmonary tuberculosis and gall stones added to the clinical confusion.

The relevant literature is reviewed and the important clinical features are emphasised.

The patient cheerfully underwent five operations, but in the last analysis he owes his life to penicillin.

REFERENCES

ECZEMA IN BRITISH TROOPS IN THE FAR EAST
A STUDY OF SOME CASES INVALIDED FROM SINGAPORE

BY

Major D. GILL, M.R.C.P. (Edin.)
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The diagnosis of those skin disorders which develop in the tropics seems frequently to be more under the influence of mystique than observed facts. So we find Singapore foot, Hong Kong ear, dhobie itch, sweat rash, monsoon blister, foot rot and a host of other vague terms in use for various commonplace conditions when they arise in a tropical environment.

Whilst there is no doubt that superficial pyogenic and mycotic infections, poral closure syndromes and intertriginous dermatitis are common and troublesome in a humid tropical climate, there is little to suggest, except in the case of acne, that they lead to much invaliding disability.

Between October, 1956 and February, 1958, 79 British soldiers were invalided from Singapore because of skin disease. Of these 58 per cent had eczema, 29 per cent had acne, 5 per cent had disabling hyperhidrosis of the extremities and the remainder were single examples of a variety of dermatoses.

The patients with eczema could be classified quite easily in the recognised groups of reaction patterns, as follows:

1. Discoid eczema ... ... ... 25
2. Chronic eczema of hands ... ... 6
3. Exudative neurodermatitis ... ... 5
4. Contact dermatitis, primary irritant type 3
5. Seborrhoeic dermatitis ... ... 3
6. Contact dermatitis, allergic type 2
7. Nickel sensitivity type dermatitis ... 1
8. Recurrent dermatitis, hands and feet ... 1

Total cases of eczema ... ... 46

Long experience has amply demonstrated the uselessness, in many of these cases, of orthodox treatment with anti-eczematous and anti-microbic applications, rest, sedation, the avoidance of frictional and other traumatic factors in
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