Clinical and other Notes.

TWO CASES OF ACTINOMYCOSIS.

By LIEUTENANT-COLONEL J. DORGAN.
Royal Army Medical Corps.

Two soldiers recently developed actinomycosis of the jaw whilst serving on the Rhine. The history and clinical features definitely indicate that the disease had been contracted in England or Scotland. Shortly before their arrival in Germany both men had been admitted to hospitals at home with inflammatory conditions of the jaw, which resulted from injury to the local mucous membrane.

The first man was in hospital in Cologne for over six weeks before the cause was suspected, during which time the disease progressed rapidly, and the patient became dangerously ill. After the diagnosis was made and treatment by potassium iodide adopted, a very definite improvement resulted. The cause of the condition was early suspected in the second patient, and in his case the progress of the disease was arrested before the tissues were seriously implicated.

Case 1.—Private J. B., 1st Battalion The West Yorkshire Regiment, enlisted at York, January 27, 1923. He was a tailor by trade. He was a patient in the Military Hospital, York, suffering from a cellulitis of the left side of the neck from June 29 to July 11, 1923. The swelling apparently subsided before his discharge from hospital. On or about July 21 a septic tooth was extracted from left lower jaw.

On August 1 he arrived with a draft in Germany. He was in camp and on manoeuvres from end of August to September 20, when he was admitted to No. 36 Casualty Clearing Station with a chronic hard swelling beneath the left jaw. He states he noticed the swelling and stiffness of the jaw since about September 1. On September 24 the swelling was opened, and a sinus probe was passed in many directions. The medical officer who saw the case considered that the infection had been introduced not later than August 1, as there was already considerable tissue destruction and fibrosis when the abscess was opened. The patient subsequently had several operations around the face, neck, and tongue. The disease was not definitely diagnosed until October 27, when specimens were submitted to microscopical examination. He was then given potassium iodide in increasing doses up to 120 grains thrice daily. He was for some time on the D.I. and S.I. Lists, but eventually he progressed favourably under local dressings of bismuth, iodine, and paraffin. He was discharged cured on January 29, 1924. Some thickening and stiffness of the jaw remained.

This patient does not remember eating grain or grasses. He often ate...
raw onions in England and also raw lettuce and tomatoes in Germany. He had had no connection with cattle or horses.

Case 2.—Trooper T. G., 1st King’s Dragoon-Guards, enlisted as a band boy in this regiment in 1918. His duties were mostly in the band, but he sometimes groomed and fed horses. In June, 1923, he broke his right jaw by falling from his horse, and was in hospital at Edinburgh for three weeks. His medical history sheet is not available. He returned to duty after three weeks in hospital, and states that he was readmitted a fortnight later, a swelling having developed near the site of fracture. A septic tooth was extracted in hospital at this time. He was discharged from hospital a week before he left for Cologne, where he arrived with his regiment on October 11, 1923.

This patient was admitted to No. 36 Casualty Clearing Station, Cologne, on October 20, with a discharging sinus near the angle of right jaw. On X-ray examination a tooth was found embedded beneath the gum; it was removed under anaesthetic. The discharge, however, continued, and on November 12 was found to contain *Streptothrix actinomyces*. Abscesses were freely opened, and potassium iodide was given internally, with good result. He had the habit of chewing corn and straw in stables.

The following preventive measures were taken:

Both men were isolated, dressings and discharges were burned, separate feeding utensils were supplied for their sole use.

Printed notices have since been posted in all horse lines warning troops against the dangerous habit of chewing hay, straw, and corn. Men are similarly warned after teeth extraction, and in mounted units they are excused stables for a week.

The lesson from these cases points to the advisability of disinfection after teeth extraction or other injury to the jaw, especially in men connected with stables, fodder, and grain, and also to the early investigation bacteriologically of inflammatory tumours of the jaw occurring in connection with wounds or abrasions of the mucous membranes of the mouth.

Both patients were seen six months after discharge from hospital. There were no ill-effects other than the extensive scarring. The jaws were freely movable.

The statistical figures for Germany for antinomycosis and botromycosis in cattle, show the following averages per thousand for the year 1917:

<table>
<thead>
<tr>
<th></th>
<th>Horses</th>
<th>Cows</th>
<th>Calves</th>
<th>Pigs</th>
<th>Sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.16</td>
<td>3.97</td>
<td>0.03</td>
<td>0.27</td>
<td>0.01</td>
</tr>
</tbody>
</table>

The Director of the Slaughter House in Cologne states that cows are infected with localized actinomycosis on an average of 4 per 1,000. The infection being mostly in the lower jaw and tongue, and sometimes on the udder.

The local population, however, does not appear to suffer much from the disease. Four deaths have been notified in the past ten years as due to actinomycosis in Cologne City. In the rural districts the disease is more frequently noted.