dairy farm workers, 24 of which had been collected from the Royal Show at Stoneleigh in 1983 and a further 270 locally in Herefordshire; the rest were part of a survey conducted in Derbyshire by the Health and Safety Executive. Of the 400 sera investigated 15 showed a positive result, indicating past infection. Hardjo anti-

bodies could be detected only at a low titre of 80 to 160. Of the 15 that were positive two were found in the Derbyshire survey and the 13 others in local Herefordshire volunteers. The overall prevalence of antibody in this group was about 4%. In a previous study undertaken in Worcestershire only one case of leptospirosis (icterohaemorrhagiae) was found in 800 sera tested by the microscopic agglutination test. Assuming the procedures used were similar this suggests that cattle associated leptospirosis is a fairly recent phenomenon and that there is a lack of general awareness of the condition in dairymen.

Lesson of the Week

Acute respiratory insufficiency from psittacosis

M VAN BERKEL, H DIK, J W M VAN DER MEER, J VERSTEEG

Introduction

In man psittacosis varies from a mild influenza like illness to a feverish disease characterised by pneumonia and general symptoms. We describe four patients with acute respiratory insufficiency due to psittacosis, which led to the death of three of them.

Patients

Four patients were referred to our hospital because of respiratory insufficiency due to bilateral pneumonia, necessitating mechanical ventila-

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Conclusion

Leptospirosis is not a new disease in the British Isles, but the epidemiological pattern has changed. Today those most at risk from icterohaemorrhagiae infection are farmers and those who pursue water sports. The predominant infecting serogroup of leptospirosis has also changed, with L hebdomadis serovar hardjo now more frequently reported than L icterohaemorrhagiae. Recent studies of the incidence of cattle associated leptospirosis show that at least 4% of all dairymen are at risk, but on the whole such infections remain undetected.

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References

3 Watchen S. Laboratory diagnosis of leptospirosis. Laboratory Technology 1983; No 17:178-84.

Psittacosis should always be borne in mind as a possible cause of fulminating pneumonia with respiratory insufficiency

from the day of admission (table). Two patients died within 24 hours, despite treatment including doxycycline, ciprofloxacin, and amoxicillin for one, and fluocxacillin, tobramycin, and erythromycin for the other. The third patient recovered gradually after treatment with oxytetracycline. In the fourth severe haemoptysis despite normal haemostasis was one of the presenting symptoms. He had been treated elsewhere for nine days with a variety of antimicrobial drugs, including doxycycline and rifampicin, to which tobramycin and azlocillin were added when Pseudomonas aeruginosa was cultured from his sputum. Nevertheless, the lung abnormalities progressed and hepatic and renal dysfunction and diffuse intravascular coagulation developed. He died on day 17.

Culture for aerobic bacteria, including legionella and mycobacteria, and attempts at isolating virus on human diploid cells and primary monkey kidney cells did not lead to a diagnosis in our patients. We did not attempt to isolate rickettsiae or chlamydiae. Chlamydia antigens were detected in sputum or lung tissue (table, figure) with an indirect immunofluorescence technique using a rabbit antiserum against purified Chlamydia psittaci antigens, prepared in our laboratory. A horse fluorescein isothiocyanate conjugated antirabbit gammaglobulin was used. The control slides were
A fit man aged 70, apart from some osteoarthritis, complained of excessive foul smelling flatus which he had for several months. He passes two or three fairly soft stools a day. He takes twice daily medication of a non-steroidal anti-inflammatory drug, the retard form of which gave him severe diarrhoea for over two days. Is any special investigation indicated?

Excessive passage of flatus may be due to aerophagy or excessive fermentation of unabsorbed nutrients, usually carbohydrates. The latter may occur in a normal individual who eats large quantities of cabbage or beans, or less commonly in patients with malabsorption due to lactase deficiency. Non-steroidal anti-inflammatory drugs commonly lead to diarrhoea or constipation, and even steatorrhoea has been reported. If this patient does not appear to be an aerophagist or to eat large amounts of cabbage or beans it would seem sensible to stop the drug without any investigations and then to be guided by his clinical progress.—JAMES COX, senior registrar, Hull.

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In all cases the diagnosis was based on the presence of inclusion bodies in pneumocytes that were positive for C psittaci antigen with the immunofluorescence test. In our last patient sputum was also tested with this technique and found positive for C psittaci antigen in ciliated cells as well. IgM or IgG antibodies were shown in the sera of all patients, and because of these findings we were able to initiate specific treatment with tetracycline in cases 3 and 4.

These cases illustrate that in patients who present with respiratory insufficiency due to pneumonia the diagnosis of psittacosis should be considered even if there has been no known contact with birds. If possible, chlamydia antigens should be sought for in sputum or biopsy specimens, and sera should be screened for IgM and IgG antibodies. While the results of investigations are being awaited antimicrobial treatment should include a tetracycline preparation.

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Details of patients

<table>
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<tr>
<th>Patient No</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>11</td>
<td>34</td>
<td>43</td>
<td>61</td>
</tr>
<tr>
<td>Sex</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Duration of symptoms before admission (days)</td>
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<td>14</td>
<td>71</td>
<td>1</td>
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<tr>
<td>Weight loss (kg)</td>
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<td>no</td>
<td>yes</td>
<td>no</td>
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<tr>
<td>White cell count (10⁶/μl)</td>
<td>3.5</td>
<td>23.5</td>
<td>33.5</td>
<td>20.3</td>
</tr>
<tr>
<td>Pco₂ (kPa)</td>
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<td>3</td>
<td>6</td>
<td>3.5</td>
</tr>
<tr>
<td>Probenecid (kPa)</td>
<td>4.5</td>
<td>3</td>
<td>6</td>
<td>3.5</td>
</tr>
<tr>
<td>Immunofluorescence test result for chlamydia antigens (highest titre)</td>
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<td>no</td>
<td>positive</td>
<td>positive</td>
</tr>
<tr>
<td>Immunofluorescence test result for C trachomatis (highest titre)</td>
<td>32</td>
<td>1024</td>
<td>negative</td>
<td>negative</td>
</tr>
</tbody>
</table>

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What treatment is advised for a young woman who has had a traumatic rupture of the anterior cruciate ligament of her knee?

There is still controversy about the role of the anterior cruciate ligament. Some believe that its rupture, in isolation, causes no problems of stability, these only arise when other structures, such as the capsule, are damaged. Others think that the anterior cruciate ligament is all important and should be repaired or augmented whenever injury to it is diagnosed. Most orthopaedic surgeons agree that such repairs are best undertaken in the acute phase of the injury. Regrettably it is rarely diagnosed at this stage. Late repairs of this ligament should be approached with caution. The patient should be taught quadrieps and hamstring exercises and these, coupled with modification of athletic requirements, may be sufficient to permit her to live a perfectly normal life. If the knee is so unstable that it disrupts her life severely then surgery should be considered. This step should not be taken lightly, and most patients are well advised to pursue the conservative regimen of management. The unstable knee can cause meniscal damage and early degenerative arthritis in the joint. Stabilisation may well prevent the early degenerative arthritis in the joint. Stabilisation may well prevent the early degenerative arthritis in the joint. Stabilisation may well prevent the early degenerative arthritis in the joint. Stabilisation may well prevent the early degenerative arthritis in the joint. Stabilisation may well prevent the early degenerative arthritis in the joint.

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