Brucellosis in Britain

Compiled by the Public Health Laboratory Service Communicable Disease Surveillance Centre and the Communicable Diseases (Scotland) Unit.

Brucellosis in Britain has become rare since the introduction of the scheme for eradication of the disease in cattle. Since 1981 over 99% of herds in England, Wales, and Scotland have been accredited as free of brucellosis on the basis of herd blood tests. Nevertheless, a few herds (0.1%, 162 herds), still had active Brucella abortus infection in 1983. Many of these breakdowns occurred in those areas that were the last to be subject to eradication procedures: north east England, Devon, Cornwall, and Wales.

The number of human infections presumed to have been contracted in Britain has fallen from over 600 a year in the early 1970s to 20 in 1983. Several of these 20 cases are considered to be recently diagnosed chronic infections. The table shows the number of human infections with Brucella abortus and unspecified species reported by laboratories since 1976.

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<tbody>
<tr>
<td>Contracted abroad</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>37</td>
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<tr>
<td>Presumed contracted in Britain</td>
<td>93</td>
<td>94</td>
<td>109</td>
<td>96</td>
<td>52</td>
<td>52</td>
<td>24</td>
<td>708</td>
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<tr>
<td>Total</td>
<td>98</td>
<td>105</td>
<td>116</td>
<td>111</td>
<td>108</td>
<td>108</td>
<td>107</td>
<td>114</td>
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Relevant occupation or likely source of infection was mentioned for 325 of the 671 cases presumed to have been infected in Britain in 1976-83: 207 patients were farm workers or dwellers, 46 were veterinary surgeons or nurses, and 40 were slaughter house workers or butchers.

Infection was contracted abroad by 37 patients; there has been no discernible trend over the period under review. The countries mentioned in reports were: Malta and Spain (four each); Israel, Italy, Saudi Arabia, and Uganda (two each); France, Germany, Greece, India, Iraq, Kenya, Morocco, Nigeria, Pakistan, Turkey, and Yugoslavia (one each); the Middle East (five). In five cases the country of origin was not specified.

Between one and seven reports of B melitensis infections were received each year. Most of these infections were contracted abroad, mainly in the Middle East and Mediterranean countries; however, two cases were reported in people who had eaten cheese imported from Jordan and Sicily and who later became ill in Britain.

Brucellosis is now a rare and decreasing hazard of occupation, but indigenous cases still occur. At the present rate of decline the annual number of cases (including B melitensis infection) associated with travel abroad—which has varied only between six and 13 in the eight years under review—will soon be the same as the number of cases presumed to have been infected in Britain.

Reference
1 Communicable Disease Surveillance Centre, Communicable Disease (Scotland) Unit, and the Veterinary Epidemiology Unit, MAFF. Human and bovine brucellosis in Britain. Br Med J 1980;280:1458.

Clinical Algorithms

Recent widespread scaly rashes

ANDREW Y FINLAY

The differential diagnosis of a scaling rash includes many conditions whose management may be entirely different: accurate diagnosis is therefore essential. Many of these diseases have specific clinical signs that may allow a confident clinical diagnosis, but this should not divert the clinician from the importance of the history in making a diagnosis.

When faced with a patient with a scaling rash, first establish the length of the history. Scaly rashes present since birth include the ichthyoses and other chronic widespread scaling rashes such as the dry skin associated with atopic eczema. Chronic localised scaly rashes include psoriasis, lichen simplex, and the chronic eczematous conditions such as seborrhoeic dermatitis. Patients with longstanding scaly rashes will, however, seldom be seen as "new" patients, and the diagnostic difficulties usually arise with new or recent scaling eruptions; the algorithm is therefore confined to this group.

If a recent scaly rash is present, consider its extent and distribution. Very localised scaly rashes are not covered by the algorithm, but in these sites the use of the rash gives a good indication of the diagnosis. If the hands or feet are affected, contact dermatitis, dermatophyte infection, psoriasis, and endogenous eczema must all be considered. Scaly plaques over the elbows, knees, and scalp suggest psoriasis, and eruptions on the face include rosacea, perioral dermatitis, and seborrhoeic dermatitis. The groin, axillae, and submammary areas are affected by intertrigo, fungal infections, flexural psoriasis, and seborrhoeic dermatitis, and the lower legs may be affected by stasis dermatitis or eczema crackle. When the wrists are affected nickel dermatitis or lichen planus should be considered.

The algorithm divides recent generalised scaly rashes into two groups; totally confluent rashes and eruptions with widely scattered lesions. All patients with a severe totally confluent eruption need hospital admission for investigation and treatment, as temperature regulation and skin barrier function become impaired. Usually these patients have developed erythrodemic exfoliative eczema or psoriasis and have had these problems before. Drug eruptions and cutaneous or systemic lymphomas may present in this way, and hence a skin biopsy is essential.

A variety of diseases where scaling is not the primary abnormality must also be considered when there are multiple widely scattered scaling lesions. These diseases include atopic and seborrhoeic dermatitis, lichen planus, and scabies.