

LETTERS

Severe *Streptococcus zooepidemicus* infection in a gardener

Andie S Lee, John R Dyer

366

Thalidomide-induced bradycardia and its management

John Coutsouvelis, Carmela E Corallo

366

Recent advances in therapy of diabetes

John B Dixon

368

Severe *Streptococcus zooepidemicus* infection in a gardener

Andie S Lee,* John R Dyer†

* Registrar, † Senior Infectious Diseases Physician, Department of Microbiology and Infectious Diseases, Flinders Medical Centre, Flinders Drive, Bedford Park, SA 5042. John.dyer@fmc.sa.gov.au

A 79-YEAR-OLD MAN presented with 5 days of right-leg pain, high fever, severe headache and deteriorating conscious state. He was previously fit and healthy and took no medications. The patient appeared unwell, had a temperature of 39.5°C, moderate irritability and depressed conscious state. There was marked neck stiffness and his left wrist and right knee joints appeared swollen and inflamed. There was a cardiac systolic murmur, but no stigmata of bacterial endocarditis.

Aspirates of the left wrist and right knee yielded purulent fluid containing numerous gram-positive cocci. The patient was admitted to the intensive care unit and treated with high dose benzylpenicillin plus vancomycin. A cerebral computed tomography scan was normal; lumbar puncture was not performed. The affected joints were washed out within 24 hours. All cultures of blood and synovial fluid yielded a Lancefield Group C β -haemolytic streptococcus, identified further using the ID 32 Strep strip (BioMerieux, Marcy l'Etoile, France) as *Streptococcus equi* subspecies *zooepidemicus* (*S. zooepidemicus*) based on its ability to ferment sorbitol and not trehalose. This isolate was shown to be sensitive to penicillin (minimum inhibitory concentration, < 0.1 mg/L). Intravenous penicillin therapy was continued. Transoesophageal echocardiography showed echodensities

close to the aortic valve which suggested vegetations.

The patient's condition improved steadily, and he ultimately received intravenous antibiotics for 6 weeks. Further history revealed that the patient collected fresh horse manure for his garden daily from a local paddock. He reported no direct contact with animals or ingestion of unpasteurised dairy products. *S. zooepidemicus* could not be cultured from a single specimen of horse manure collected from the paddock, and it was not possible to collect clinical specimens directly from any of the horses that used the paddock.

Human infection with *S. zooepidemicus* can usually be traced to an animal source.¹ Outbreaks associated with ingestion of unpasteurised milk and cheese have also been described.^{2,3} Likely entry routes include the respiratory or gastrointestinal tract and skin.¹ Severe sequelae of *S. zooepidemicus* infection include endovascular infection, meningitis, septic arthritis, and epidemic post-infectious glomerulonephritis. Our patient's clinical picture indicated multifocal sepsis, with polyarthritis, endocarditis, and probable meningitis. In a recently reported case of *S. zooepidemicus* meningitis, pulsed-field gel electrophoresis showed molecular identity between patient isolates and a throat swab isolate from a horse with which the patient had been in close contact.⁴ Our patient was most likely infected via the respiratory or cutaneous routes, or by ingestion after contact with respiratory secretions of horses deposited in the environment.

Exposures in the garden can lead to a variety of severe infections.⁵ This is the first reported case where *S. zooepidemicus* infection appears to have been acquired through gardening. Severe dis-

ease with this organism can be a particular hazard in elderly gardeners with comorbid conditions.¹

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Thalidomide-induced bradycardia and its management

John Coutsouvelis,* Carmela E Corallo†

* Oncology Pharmacist, † Deputy Director of Pharmacy, Box Hill Hospital, Nelson Road, Box Hill, VIC 3128. John.coutsouvelis@boxhill.org.au

TO THE EDITOR: Thalidomide has recently been approved for use in treating recurrence of erythema nodosum leprosum and multiple myeloma after failure of standard therapies. Common side effects of thalidomide treatment include drowsiness, sedation, rash and paraesthesiae.¹ Dizziness, hypotension and bradycardia occur less commonly.¹⁻³ Of 91 patients treated with thalidomide (80 with multiple myeloma), we have had one case of symptomatic bradycardia. We describe this patient, who was able to continue treatment on a reduced dose of thalidomide.

A 71-year-old woman, with a history of breast cancer (treated with radiotherapy and tamoxifen), arthritis, crush fractures, and hip and knee replacement, was diagnosed with multiple mye-

loma. She was prescribed intravenous pamidronate 90 mg every month and oral therapy with melphalan, but she experienced haematological toxicity and the melphalan was stopped.

After progression of the disease, 100 mg of thalidomide was commenced at night, with the aim of increasing the dose by 100 mg every fortnight until a response was achieved. Three weeks later, the patient presented to hospital for pamidronate infusion complaining of a 2-week history of shortness of breath, especially on exertion. There was no oedema present, and her blood pressure was 135/70 mmHg. Electrocardiography showed sinus bradycardia, with a heart rate of 46 beats/min. The dose of thalidomide had been titrated to 200 mg at night.

Thalidomide was stopped, and the patient was referred to a cardiologist, who performed an echocardiogram, 24-hour Holter monitoring and a stress test. The results from these tests showed no underlying cardiac disease or abnormalities.

Six weeks later, on review, the bradycardia had resolved (heart rate, 60

beats/min). Thalidomide was recommenced at 100 mg daily. However, after a further 6 weeks, her heart rate had decreased again to 45 beats/min, and the dose of thalidomide was reduced to 100 mg on alternate days.

Thalidomide therapy has been continued in this patient at 100 mg on alternate days. Her heart rate has stabilised between 50 and 55 beats/min, and she has remained asymptomatic. The multiple myeloma is responding to treatment, as indicated by symptom control and serial measurements of IgG kappa. She continues to take hydroxychloroquine, rofecoxib and sertraline.

Bradycardia is a rare side effect of thalidomide therapy, with an incidence of 0.12%.^{1,2} The mechanism is unknown, but could be related to thalidomide's central sedative effect.¹ There are isolated published case reports of thalidomide-induced bradycardia; in all cases the drug was stopped.²⁻⁵

Thalidomide is being used for various conditions for which no alternative therapy exists. As the drug is now commer-

cially available in Australia, its use is likely to increase. In all patients taking thalidomide, we recommend measuring heart rate; and in those with underlying heart disease, or who are taking medications that can precipitate bradycardia, we recommend electrocardiographic monitoring.

Our findings in this patient suggest that thalidomide-induced bradycardia can be successfully managed with dose reduction and regular monitoring.

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Recent advances in therapy of diabetes

John B Dixon

Senior Research Fellow, Monash University
Department of Surgery, Alfred Hospital,
Commercial Road, Melbourne, VIC 3181.
john.dixon@med.monash.edu.au

TO THE EDITOR: I am concerned about a possible misrepresentation in the Journal. A recent Practice Essentials article included a case report describing the management of type 2 diabetes.¹ The case involved a 51-year-old man with a 6-year history of type 2 diabetes and body mass index (BMI) of 32 kg/m². The case report included a photograph, but this was not of a man with a BMI of 32 kg/m². Ten consecutive professional staff working at a large Melbourne centre for bariatric (obesity) surgery were asked to estimate the man's BMI. Estimates varied from 50 to 65 kg/m². None accepted that his BMI was 32 kg/m². All estimates placed this gentleman in the obesity class III category (BMI > 40 kg/m²). A man with a true BMI of 32 kg/m² is shown in the Box.

If indeed the man depicted previously has class III obesity, he is likely to suffer significant obstructive sleep apnoea,² physical disability and poor quality of life, in addition to the metabolic syndrome and type 2 diabetes. The case report focused on the management of an unacceptable level of glycosylated haemoglobin (HbA_{1c}) of 8.9%. The management may, arguably, be appropriate if his BMI were 32 kg/m², although treatment options may promote weight gain. Unfortunately, the options and discussion were inadequate for the man depicted.

This ill, disabled man deserves better assessment and care. His obesity-related conditions should be fully explored. The only management likely to have a significant effect on conditions related to class III obesity (diabetes, metabolic syndrome, sleep apnoea, physical disability and poor quality of life) is significant weight loss. The only treatment that reliably provides significant sustained weight loss for those with class III obesity is surgery. Obesity surgery therefore should be an essential inclusion in his treatment options. The beneficial effects of modern obesity surgery on type 2 diabetes, the metabolic syndrome, sleep and quality of life are well documented.^{3,4}



Patient with a body mass index of 32 kg/m²
(height, 172 cm; weight, 96 kg)

I believe the inclusion of this illustration is a serious misrepresentation.

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