This patient is a rare case of severe sight-threatening thyroid eye disease presenting 14 years after diagnosis of thyrotoxicosis. While the vast majority of patients who develop thyroid eye disease will do so in an 18-month period before or after the time of systemic diagnosis, it is important to be aware that sight-threatening thyroid eye disease may present many years after the initial diagnosis and treatment of thyrotoxicosis. Prompt diagnosis and treatment of this condition is likely to preserve sight.

References

- 1 Bartley GB, Fatourehchi B, Kadrmas EF, Jacobsen SJ, Ilstrup DM, Garrity JA *et al.* Clinical features of Graves' ophthalmopathy in an incidence cohort. *Am J Ophthalmopathy* 1996; **121**(3): 284–290.
- 2 Gorman CA. Temporal relationship between onset of Graves' ophthalmopathy and diagnosis of thyrotoxicosis. *Mayo Clin Proc* 1983; **58**: 515–519.
- 3 Garrity JA, Fatourehchi V, Bergstralh EJ, Bartley GB, Beatty CW, DeSanto LW *et al.* Results of transantral orbital decompression in 428 patients with severe Graves' ophthalmopathy. *Am J Ophthalmol* 1993; **116**: 533–547.
- 4 Bartley GB, Fatourehchi V, Kadrmas EF, Jacobsen SJ, Ilstrup DM, Garrity JA *et al.* The chronology of Graves' ophthalmopathy in an incidence cohort. *Am J Ophthalmol* 1996; **121**: 426–434.
- 5 Wiersinga WM, Smit T, van der Gaag R, Koornneef L. Temporal relationship between onset of Graves' ophthalmopathy and onset of thyroidal Graves' disease. *J Endocrinol Invest* 1988; **11**(8): 615–619.

B Manzouri, A Bates, GE Rose and GGW Adams

Moorfields Eye Hospital, City Road
London EC1V 2PD, UK

Correspondence: B Manzouri

Tel: +2075662013

Fax: +2075662972

E-mail: b.manzouri@ntlworld.com

Eye (2004) **18**, 1021–1023. doi:10.1038/sj.eye.6701396

Published online 16 April 2004

Sir, *Leuconostoc mesenteroides* as a cause of post-operative endophthalmitis—a case report

Postoperative endophthalmitis is a dreadful complication after uncomplicated cataract surgery. Acute postoperative endophthalmitis has been reported with various organisms; particularly Gram-positive cocci are known to cause endophthalmitis in the first 48 h after surgery.

Leuconostoc mesenteroides has been reported as a cause of nosocomial urinary tract infection, infection in patients with neutropenia and cancer, prosthetic valve endocarditis, liver transplantation, severe burn injuries, and AIDS.^{1–9} Intrinsically, vancomycin-resistant Gram positives are usually opportunistic pathogens. To our knowledge, this is the first case report of *L. mesenteroides* endophthalmitis after phacoemulsification.

Case report

A healthy 76-year-old gentleman has a routine uncomplicated phacoemulsification with posterior chamber implantation. After 48 h, he presented to the casualty department with very poor vision and pain in the operated eye even though he could see well after 24 h after surgery. He had noticed some floaters prior to complete loss of vision. He did not have any ocular or systemic disease, that could predispose for a postoperative infection. He presented with only 'perception of light', hypopyon, slightly elevated (23 mmHg) intraocular pressure and fundus could not be seen due to vitreous opacification. A diagnosis of endophthalmitis was made and vitreous biopsy was carried out urgently, which included intravitreal injection of vancomycin and amikacin at the end of the procedure. Initial microbiologic examination showed Gram-positive cocci and he was treated with systemic ciprofloxacin and prednisolone. He also received topical gentamicin, ciprofloxacin, and cycloplegics. After 48 h, culture showed *L. Mesenteroides* that was sensitive to gentamicin, erythromycin, and chloromphenicol, but resistant to vancomycin, penicillin, ceftazidime, and amikacin. His symptoms improved in 3 days, but vision remains 'hand movements' after 3 months.

This report highlights the importance of *Leuconostoc* spp as an emerging pathogen, even though the modes of transmission and reservoirs are yet unknown.

Comment

L. Mesenteroides are Gram-positive cocci in pairs or short chains. They are microaerophilic; catalase-negative, ferment sugars, and produce gas. Species of this genus are normally present in plant materials, dairy products, and other fermented food stuffs as well as spoiled foods so that they are likely to be encountered in public health laboratories; such isolates are usually vancomycin-resistant. They have been isolated from the blood cultures and, as with pediococci, some were resistant to vancomycin.⁴ In the laboratory, detran-forming cultures may be confused initially with *Streptococcus bovis* biotype, because both yield watery colonies on sucrose agar and share other biochemical characteristics. The *Leuconostoc*

differ from other Gram-positive catalase-negative cocci in that they grow in air with or without added CO₂.

Although serious infections may occur, treatment options remain available. No additional infection control measures for intrinsically resistant genera appear justified with currently available evidence, although vigilance should be maintained to detect culture changes in susceptibility patterns. *L. Mesenteroides* should be considered as a potential cause of infective endophthalmitis and listed in the group of vancomycin-resistant microorganisms.

References

- Bernaldo de Quiros JC, Munoz P, Cercenado E, Hernandez Sampelayo T, Moreno S, Bouza E. *Leuconostoc* species as a cause of bacteremia: two case reports and a literature review. *Eur J Clin Microbiol Infect Dis* 1991; **10**(6): 505–509.
- Cappelli EA, Barros RR, Camello TC, Teixeira LM, Merquior VL. *Leuconostoc pseudomesenteroides* as a cause of nosocomial urinary tract infections. *J Clin Microbiol* 1999; **37**(12): 4124–4126.
- Carapetis J, Bishop S, Davis J, Bell B, Hogg G. *Leuconostoc sepsis* in association with continuous enteral feeding: two case reports and a review. *Pediatr Infect Dis J* 1994; **13**(9): 816–823.
- Espinoza R, Kusne S, Pasculle AW, Wada S, Fung J, Rakela J. *Leuconostoc* bacteremia after liver transplantation: another cause of vancomycin resistant gram-positive infection. *Clin Transplant* 1997; **11**(4): 322–324.
- Ferrer S, de Miguel G, Domingo P, Pericas R, Prats G. Pulmonary infection due to *Leuconostoc* species in a patient with AIDS. *Clin Infect Dis* 1995; **21**(1): 225–226.
- Handwerger S, Horowitz H, Coburn K, Kolokathis A, Wormser GP. Infection due to *Leuconostoc* species: six cases and review. *Rev Infect Dis* 1990; **12**(4): 602–610.
- Hardy S, Ruoff KL, Catlin EA, Ignacio Santos J. Catheter-associated infection with a vancomycin-resistant gram-positive coccus of the *Leuconostoc* sp. *Pediatr Infect Dis J* 1988; **7**(7): 519–520.
- Jimenez-Mejias ME, Becerril B, Gomez-Cia T, Del Nozal M, Palomino-Nicas J. Bacteremia caused by *Leuconostoc cremoris* in a patient with severe burn injuries. *Eur J Clin Microbiol Infect Dis* 1997; **16**(7): 533–535.
- Noriega FR, Kotloff KL, Martin MA, Schwalbe RS. Nosocomial bacteremia caused by *Enterobacter sakazakii* and *Leuconostoc mesenteroides* resulting from extrinsic contamination of infant formula. *Pediatr Infect Dis J* 1990; **9**(6): 447–449.

D Kumudhan and S Mars

Christopher Home Eye Unit
Royal Albert Edward infirmary
Wigan WN1 2NN, UK
Correspondence: D Kumudhan, FRCSEd, FRCS
Ward 25, Ninewells Hospital & Medical School
Dundee DD1 9SY, Scotland, UK
Tel: +44 1382 660111
Fax: +44 1382 632893
E-mail: kumudhaneye@aol.com

Eye (2004) **18**, 1023–1024. doi:10.1038/sj.eye.6701397

Published online 2 April 2004