

ing from an apparent envelope (Davis and others 1995b). No other virus particles were detected in the extract.

We have also measured pancreatic glucagon in field and experimental chicks with SMS using radioimmunoassays. These values were compared with levels in clinically normal chicks with normal glucose levels. Pancreatic glucagon was drastically depressed in hypoglycaemic chicks with SMS, in both the field (Davis and Vasilatos-Younken 1995) and the experimental cases (unpublished data).

Furthermore, immunohistochemistry procedures carried out on formalin-fixed tissues from field (Davis and others 1994) and experimental (unpublished data) chicks with SMS, produced heavy staining in the cytoplasm of some pancreatic islet cells and in other cells commonly infected by arenaviruses in rodents (de la Torre and Oldstone 1992, Connolly and others 1993). This staining was produced using both a monoclonal antibody which recognises New World arenaviruses, and a polyclonal antibody which recognises a certain known arenavirus.

Our findings suggest that: (a) SMS is caused by an agent which morphologically resembles arenaviruses when negatively stained and viewed using TEM; (b) this agent may be detectable in formalin-fixed tissues when using immunohistochemistry and antibodies which recognise arenaviruses; and (c) the agent may be antigenically related to known arenaviruses, and therefore may be causing a suppression of glucagon production by infecting glucagon-producing pancreatic islet cells. This would be consistent with the pathogenesis of some arenaviruses infecting other species (de la Torre and Oldstone 1992, Connolly and others 1993).

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Isolation of parapoxvirus from grey seals

SIR, - In *The Veterinary Record* of December 17, 1994 (p 601), we described the first successful isolation of a parapoxvirus from grey seals during an outbreak of skin lesions in a seal sanctuary in the United Kingdom. Due to an administrative error, the contributions to this study of James Barnett of the Cornish Seal Sanctuary, Gweek, Cornwall, and of Victor Simpson of the MAFF Veterinary Investigation Unit, Polwhele, Truro, Cornwall, and Messrs John Head, Noel Stuart and Tony Ross of Helston, Cornwall, were not mentioned. Therefore, I would like to acknowledge their efforts in collecting, selecting and shipment of samples from grey seals in Cornwall, involved in this outbreak, which was described in detail by Stack and others (1993) and Simpson and others (1994).

Largely thanks to the valuable contributions of the above mentioned people and of collaborators at other seal rehabilitation centres, it has been possible to identify and/or characterise a series of not previously recognised viral pathogens of aquatic mammals in the past and to estimate the impact of these viruses on these animals (see, for example, Osterhaus and Vedder 1988, Visser and others 1993). Therefore, I would like to stress that the benefits of the activities of seal rehabilitation centres and affiliated organisations are not limited to the direct care of diseased and orphaned seals, but also make a major contribution to our understanding of their infectious diseases. This has direct consequences for the long-term management of marine mammal populations in general and of seal populations in particular.

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RCVS certificate in animal welfare science, ethics and law

SIR, - Clarification is required of the difference between enrolment for the RCVS certificate in animal welfare science, ethics and law and the modular course of the same name which has been organised by the department of clinical veterinary medicine, University of Cambridge.

Enrolment for the RCVS certificate must take place via the education department at the RCVS. The Cambridge course is independent

although it is designed to assist candidates in their preparation for entry to the certificate examination.

As some potential candidates for the RCVS certificate seem to be unclear about the difference, the Animal Welfare Science, Ethics and Law Board has agreed that, as a concession and without precedent, late applications for enrolment and applications for approval of experience (together with the required 15 to 25 case exposures) will be accepted by the RCVS up until April 1, 1995, for this year only.

Potential candidates wishing to enter for the first examination this autumn who feel that they will be able to prepare the required submitted work by the extended closing date should obtain application forms from the board secretary at the RCVS. Those who do not take this opportunity will be able to enrol for the certificate in animal welfare science, ethics and law at the next annual enrolment date of November 1.

Pamela C. E. Wignall, *Chief Education Officer, Royal College of Veterinary Surgeons, 32 Belgrave Square, London SW1X 8QP*

Garlic breath

SIR, - An appeal to veterinary surgeons to help us! For the last month we have been inundated (over a dozen cases) with clients who are commenting on their dogs' breath; it smells of garlic!

Having examined some of these dogs, I would agree with our clients that this smell is most unusual. The breeds involved range from pyreneans to yorkies receiving a range of diets (not including garlic bread and such like!). The one common sign is that they consume a lot of water for various reasons. None of the affected dogs is clinically unwell. Having spoken to Severn Trent Water, they assure us that they have not changed the treatment of our drinking water. One client (the yorkie owner) has kindly offered to use bottled water to rule out the drinking water link.

We would welcome and appreciate any comments on this rather unusual problem.

Will Jeffels, Bob Bostelmann, John Treanor, Colin Turtle, *The Veterinary Centre, Eccleshall Road, Walton, Stone, Staffordshire ST15 0HJ*

SIR, - Within the last month I have seen a rather peculiar trend. I examined a dog and the only complaint was of a garlic odour to the breath - it was very pungent. The dog was fine in itself and had not eaten or had access to food containing garlic.

I thought nothing of it, but we have now had half a dozen inquiries from clients with the same complaint. Are the pet food manufacturers adding something to the diet, or, more likely, is there a source of wild garlic which the dogs are discovering while out on walks? I would be interested to hear from colleagues if this is widespread.

R. J. Grimmer, *30 Oathall Road, Haywards Heath, Sussex RH16 3EQ*

