group compared to D0 from D7 (–53%) reaching the lowest score at D24 (–91%), $p < 0.05$.

STATEMENT (CONCLUSIONS)

The combination of Ophytrium- and Seboliance-containing shampoo and subsequent mousse every

48–72 hours can be recommended as a convenient protocol to improve hair coat quality in seborrheic dogs, from the first week, with a maximal improvement on D24 and no side effects.

Resistance of canine *Staphylococcus pseudintermedius* to selected topical and systemic antimicrobials in the UK

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OBJECTIVES

Canine methicillin resistant *Staphylococcus pseudintermedius* (MRSP) is a growing concern due to the wide range of infections this bacterial strain causes. Carriage of the *mecA* gene and penicillin binding protein 2A causes resistance to beta-lactam antimicrobials. This project aimed to (1) investigate phenotypic oxacillin (methicillin) resistance based on CLSI breakpoints compared to EUCAST breakpoints, (2) investigate the carriage of the *mecA* gene using PCR analysis, (3) compare the carriage of these genes to phenotypic oxacillin resistance using both published breakpoints, (4) compare the presence of

mecA gene (gold-standard) for the detection of MRSP with two different selective agars.

METHODS

PCR analysis was used to identify the presence of MRSP and MSSP isolates, followed by further PCR analysis to identify the carriage of the *mecA* gene. These isolates underwent susceptibility testing using BSAC/CLSI/EUCAST breakpoints and various antibiotics including oxacillin, then testing with two different selective agars. Selected isolates underwent PBP2a testing.

RESULTS

After PCR analysis, 56.73% isolates were identified as *mecA* positive. EUCAST breakpoints correctly identified 57.90% isolates as resistant and CLSI breakpoints correctly identified 47.95% of samples as resistant. Brilliance-MRSA-2 agar correctly identified 45.03% of isolates as positive and MSA-1%-oxacillin agar correctly identified 44.44% of isolates as positive. PBP2a correctly identified 33.33% of isolates as positive.

STATEMENT (CONCLUSIONS)

PCR analysis was confirmed as the gold-standard of testing. EUCAST breakpoints were the next most effective test, followed by CLSI breakpoints, Brilliance agar, MSA agar and PBP2a testing. These tests could be used as screening to decide which isolates need further analysis by PCR.

On the feasibility of remote diagnosis of canine dermatology conditions

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OBJECTIVES

To measure the extent to which veterinary professionals may be measurably compromised in their ability to issue accurate diagnoses of canine dermatology conditions on a digital device without being physically present with the patient.

METHODS

Three veterinary dermatology specialists from different parts of the country assessed their routine canine dermatology cases in-clinic (10 cases each), and took photographs of the affected area using smartphones. These photographs, along with signalment and clinical notes, were uploaded to an online database. Each specialist then diagnosed each other's cases online, blinded to the in-clinic diagnosis, choosing from a list of 58 skin conditions. The agreement between the definitive diagnosis issued in-clinic and the (up to three) differential diagnoses issued online was measured using Cohen's kappa statistic.

RESULTS

The agreement between the definitive diagnoses (in-clinic) and first-differential diagnoses (remote) was excellent, with kappa = 0.82. The extent to which the definitive diagnosis was contained in the list of up to three differential diagnoses – a measure of the remote

Oral presentations

vet being “on the right track” — was better, with kappa = 0.88. It is impossible to attribute the small, residual disagreement to being remote from the patient, so this study is evidence that remote diagnosis of canine skin conditions is likely to be effective and safe.

STATEMENT (CONCLUSIONS)

This study demonstrates that i) the global animal welfare problem can be tackled through remote care on digital devices, and ii) there is great potential for vets to work at home, accommodating family commitments.

Canine erythematoceruminous otitis: clinical, microbiological, lipid and cytokine characteristics

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OBJECTIVES

Erythematoceruminous otitis (ECO) is the most common type of otitis seen in canine practice. The objective was to identify and quantify several parameters of ECO including the infectious components but also the cytokine and lipid profile of such ear canals.

METHODS

Forty canine ear canals with ECO of otherwise healthy dogs, not under any type of aural treatment or cleaning for 7 days were assessed with OTIS3 score and a 0–4 scale cytology score. Bacterial cultures were performed. Aural surface concentrations of a panel of 13 cytokines/chemokines were measured using multiplex analyses (Milliplex Canine Cytokine Panel). Lipid profile of the exudate was analysed with gas chromatography coupled to mass spectrometry.

RESULTS

Ear canals had a median OTIS3 score of 3 [1–6] and a median cytology score of 2 [2–3], with *Malassezia* yeast (40/40), coccoid (9/40) or rod-shaped bacteria (4/40) overgrowth. Positive bacterial cultures (19/39) principally yielded *Clostridium perfringens* (7/39), *Staphylococcus pseudintermedius* (6/39) and *Pseudomonas aeruginosa* (4/39). High concentrations of interleukin 8 were detected (mean 712 pg/mL [normal range 75–237]; keratinocyte-derived chemokine-like concentrations were considered normal (mean 171 pg/mL [normal range 89–170]). Free forms of lipids (fatty aldehydes, fatty acids, long-chain alcohols) were relatively more abundant than in normal ears whereas bound forms, in particular waxes and short-chain cholesteryl esters, were less abundant.

STATEMENT (CONCLUSIONS)

In this cohort, ECO was characterised by *Malassezia* overgrowth combined with bacteria in about 30% of cases. Cytokines/chemokines and lipid profiles were modified compared to normal ears.

BSAVA Manual of Canine and Feline Dermatology Third edition

Edited by: Hilary Jackson and Rosanna Marsella

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