Mentoring and supporting students

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Mental health is at the forefront of all educational establishments. It is well recognized that students require support in both their academic needs and their mental health needs, to both guide them through their studies and in preparation for the working environment. At one time or another, most of us will experience a period of stress in our lives. How we deal with that stressor, what we glean from it, how we cope with it and build up resilience and move forwards towards the future determines how prepared we will be for future stressors that come our way. Students need mentoring and supporting to prepare them for such situations and guide them into getting the necessary support so that they can continue with their studies and develop as a person.

Students benefit from having someone who is familiar to them and experienced either in the workplace or in the educational establishment, to whom they can turn to for advice. It is not this person's role to solve all their problems but rather to support the student and to offer guidance from where to best seek further help. Students need a listening ear, someone in whom they trust, and someone who will treat them with respect.

Support and mentoring can be offered in a variety of ways. Students will constantly learn from experiences happening around them and therefore the working and educational environment must be a supportive one. Somewhere where the student feels safe and is readily able to learn from role models, other staff and students in a supportive and nurturing environment is one that will teach the student much about life as well as about the veterinary industry. A busy college or university or veterinary practice needs to fulfil its job in caring for patients or in teaching together with nurturing and supporting students in its everyday life. Working in an environment that is supportive is important for everyone, not solely for students. Support should be at the core of everything that is done; indeed, various social media platforms have done much to raise awareness of such issues in the veterinary practice.

How to support and mentor students in everyday life as well as in times of poor mental health will be explored and discussed further during this lecture.

KEY LEARNING OBJECTIVES

- To recognize why students need mentoring and support
- To describe the qualities someone supporting students should have
- To illustrate how students can be mentored and supported in education and in the workplace

Infection control: a challenge for the whole team

Louise O'Dwyer

Infection control is a vitally important consideration for the whole of the practice, but technicians can play an instrumental role in its implementation. As with human healthcare facilities, veterinary practices face similar challenges with hospital-acquired infections (HAIs). For veterinary practice, the close contact between people and their pets allows the transmission of infectious agents between humans and animals, and in both directions. As a result, many of the commonly seen HAIs in human hospitals are now seen in veterinary hospitals.

Commonly encountered HAIs include:

- Intravenous catheter infections
- Surgical site infections
- Pneumonia
- Urinary tract infections

In high-risk patients, a high index of suspicion should be maintained. In patients developing clinical signs of HAI, careful evaluation should be performed for identification of an underlying source.

PREVENTING HAIS

Complete prevention of HAIs is impossible, but the inclusion of strategies aimed at limiting infection should be present in all hospital situations. There is no current evidence base on which to base these in the current veterinary literature, although there is a wealth of information in the human field. Multiple interventions applied at the same time will be more efficacious than single interventions, although implementation of this can be difficult.

The following interventions should be considered within the hospital environment for the prevention of HAIs:

- Hand hygiene
- Environmental cleaning and disinfection
- Isolation and barrier nursing
- Antimicrobial stewardship

Environmental cleaning and disinfection

Gloves and appropriate personal protective equipment (PPE) should be worn whenever using disinfectants. Additional PPE should be worn if there is the probability of splash from contaminated surfaces or disinfectants. Gross contamination will inactivate most disinfectants. Wash the area with water and detergent or soap; scrubbing or mechanical disruption is necessary to break down biofilms and residual debris that prevent or inhibit the proper disinfection process. Rinse the cleaned area to remove any detergent residue as detergents may

inactivate some disinfectants. Allow area to drain or dry as much as possible to prevent dilution of disinfectants.

Isolation and barrier nursing

Guidelines for isolation and barrier nursing should be present in all large practices and should be considered for any busy emergency practice. These aim to protect staff, the patient and other patients from the risk of acquiring infectious disease. High-risk patients or those that have a HAI should be nursed appropriately to prevent the spread of infection. Considerations for the individual patient should include the risk to other patients which will depend on the agent and the severity of the patient's clinical status. Protective clothing should be available for veterinary personnel dealing with the patient.

CONCLUSIONS

Biosecurity and infection control are major considerations within veterinary hospitals. Biosecurity policies and procedures should be developed in each hospital to reduce the risk of all nosocomial and zoonotic illness. All staff should be trained and confident in ensuring strict adherence to biosecurity and infection-control protocols.

KEY LEARNING OBJECTIVES

- Understand the underlying principles behind infection control

- Recognize the commonly encountered hospital-acquired infections and how their incidence can be minimized
- Gain an improved knowledge in dealing with patients in isolation and barrier nursing techniques

MULTIPLE CHOICE QUESTIONS

- When is reduced compliance with hand hygiene protocols seen?
 - (A) During busier periods
 - (B) When new products are introduced
 - (C) When hand hygiene auditing is being performed
 - (D) When only hand gels are available
- When should gloves ideally be changed?
 - (A) Moving from contaminated areas to clean areas on the same animal
 - (B) Moving from dirty to clean procedures on the same animal
 - (C) Between individual animals
 - (D) All of the above
- Which of the following describes cleaning and disinfection?
 - (A) Remove organic debris
 - (B) Protects organisms
 - (C) Decreases contamination by at least 90%
 - (D) All of the above

Lungworm: should we be worried?

Emily Thomas

Angiostrongylus vasorum is an emerging and important parasite in dogs in the UK that can cause fatal disease if left untreated. It is endemic in southeast England and south Wales, and has been reported as far north as Scotland. Distribution is patchy, but prevalence and spread have increased in recent years.

The intermediate hosts are slugs and snails, which are ingested by the dog. After ingestion the larvae move through several life cycle changes, ending up as adults in the right side of the heart and pulmonary vasculature. Here the adults lay eggs that develop into larvae which migrate to the alveoli and are coughed up, swallowed, and eventually shed in faeces. Molluscs are infected by environmental contact, and the life cycle begins again.

CLINICAL SIGNS

Angiostrongylus vasorum can cause a range of clinical signs in dogs, with disease varying from life threatening to subclinical. Pulmonary inflammation may result in coughing, exercise intolerance or respiratory distress. Approximately one-third of patients present with a coagulopathy,

This may cause clinical signs including spontaneous bleeding, excessive bleeding after surgery, or neurological signs secondary to bleeding into or around the brain and/or spinal cord.

DIAGNOSIS

The IDEXX Angio Detect® test is a rapid, in-house test that detects an antigen released by the adult nematode. Its sensitivity and specificity are good, but there is still a risk of false-negatives, particularly early during infection. Faecal smear evaluation is a rough and ready test that might be useful when client finances are limited. The smear is made by mixing a small quantity of faeces with a drop of tap water on a slide, and examined under x10 magnification for larvae (<https://www.youtube.com/watch?v=HMjzUNB1Lpl>). The test has low sensitivity but very high specificity, i.e. there is a risk of false-negatives. Faecal samples can also be submitted for Baermann analysis. Larval shedding can be intermittent, so ideally a 3-day pooled sample is submitted. Diagnosis can also be made from cytology of bronchoalveolar lavage fluid, but this procedure is costly and carries risks in patients with respiratory compromise.

Coagulation testing can be useful, including a platelet count and, when available, prothrombin and activated partial thromboplastin times. However, there is no consistent pattern of coagulation test abnormalities characteristic for the parasite.