Gastrointestinal blues

Following last year's positive feedback, the Annual Irish Veterinary Nursing Association Roadshow was once again held as a day event, which carried seven CVE credits on three Saturdays. The roadhsow was held in three locations around Ireland starting in the Maldron Hotel in Galway, moving on to the Dogs Trust Dublin, and ending at St John's College, Cork, writes Lorraine McDonnell, chairperson, Irish Veterinary Nurses Association

This year's topic was all about the 'gastrointestinal (GI) blues', focusing on both the medical and surgical side of GI issues. This year's speaker was Sinead Sheerin RVN CertVNFCC, who is always popular with the delegates. Sinead has many years experience as an intensive care nurse and also holds a certificate in critical care.

This year's roadshow emphasised the role nurses take in practice in relation to nursing, monitoring, and helping to identify complications as they arise. These lectures helped to educate both newly qualified and more experienced nurses.

The first lecture of the day covered nursing of the GI surgical patient, focusing on gastric dilation and volvulus (GDV), GI obstruction and complications.

Sinead highlighted contributing factors that can be associated with GDV from age and temperament, to pre-existing conditions. Those attending examined all the clinical signs, which nurses need to look out for. It was reiterated that all clinical signs discussed were highly suggestive of GDV, however some signs could also be associated with other diseases such as splenic torsion and ruptured splenic haemangiosarcoma. Sinead continued to proceed through the following three steps of patient stabilisation where nurses should be very much involved.

STEP 1: REVERSE SHOCK

- Maintain cardiac output;
- Correct hypoperfusion of tissues as soon as possible;
- Select the correct fluids of choice and what should be used, eg. Hartmann's versus 0.09% sodium chloride (Sinead emphasised why it is important never to use the saphenous vein);
- Follow by oxygen therapy and blood work.

STEP 2: THE DECOMPRESSION OF ABDOMEN

After going through the placement of an orogastric procedure, Sinead highlighted that the risk of damage which can be caused to the oesophagus, is extremely high, especially if passed too aggressively when passing the tube to the stomach.

Gastric lavage follows if indicated.

If patients are intolerant of orogastric intubation, a procedure called gastrocentesis can be used if a patient is too unstable to sedate or where attempts to pass the tube are unsuccessful. This, however, carries risks, as this technique involves blindly placing a needle through a possibly already compromised gastric wall.

STEP 3: RADIOLOGY

Sinead said that radiographs are not always required, as symptoms, history and physical exam can indicated a GDV. However, if radiographs are needed, it is usually to differentiate between gastric dilation alone or GDV, and they should only be taken once the patient has been adequately stabilised.

STEP 4: SURGICAL INTERVENTION

The different surgical procedures from partial gastrectomy to gastropexy were discussed.

OBSTRUCTIONS

GI obstructions are cases that are seen on a daily basis in practice. GI obstructions can lead to vomiting, which can lead to secondary issues for example:

- Aspirate pneumonia, risk of aspiration
- Electrolyte and acid-base disturbances;
- Dehydration;
- Risk of perforation; and
- Hypovolaemic shock.

The main focus in this talk was on neoplasia, pyloric stenosis and intussusceptions.

For neoplasia, clinical signs are dependent on the location, degree and the type of neoplasia found.

A quick induction was given on pyloric stenosis, the constriction causing narrowing (stenosis) of the entrance to the small intestine, including symptoms and surgical intervention. As we are seeing more of these cases in practice, Sinead emphasised the nurses' role in these cases and the best way to stabilise the patient prior to further diagnostics and, more importantly, surgery.

FOREIGN BODY INGESTION

Sinead gave us examples of an array of foreign bodies

that have the potential to be ingested. She discussed the intestinal foreign bodies that would require surgical intervention like exploratory laparotomy versus medical intervention by using endoscopy.
Linear foreign bodies and intussusceptions were also talked about in depth. The role of the nurse in particular, is very important in these cases, ensuring swab count prior and post-surgery, along with post-operative management of patients.
It is crucial that nurses are able to identify where complications may arise, for example anaemia, re-occurrence, gastritis, and disseminated intravascular coagulation (DIC). A list of simple advice was also given to ensure that patient recovery is uneventful at home as us nurses are the contact for the pet owners.

MEGAESOPHAGUS

There was a second talk dealing with the medical aspect of GI disease, starting with megaesophagus and at both congenital and idiopathic. Congenital relates to vascular ring anomaly or persistent right aortic arch, which are acquired in the adult stage of life and which can be primary (idiopathic) or secondary. Twenty-five per cent of megaesophagus patients have:

- *Myasthenia gravis (*MG);
- Oesophagitis;
- Foreign bodies;
- Hypoadrenocortisim (Addison's);
- Laryngeal paralysis.

Patients also may have contributing factors that may cause megaesophagus. We reviewed the definition of regurgitation and vomiting, as it is very important that nurses can differentiate between the two, especially when talking to owners.
Radiographs are used to diagnose, however, sedation cannot be used in these cases, eg. x-ray. Other diagnostic tests are preformed to try and identify the underlying cause. Nurse's roles were discussed including treatment, diet and advice nurses can give owners to help improve symptoms at home. After a quick recap on the role of the pancreas, Sinead covered one of the most common diseases seen in practice, pancreatitis. The cause of pancreatitis is unknown and is often idiopathic, but there can be contributing factors, for example diet, trauma, hyperadrenocorticism and surgery. Diagnostic imaging including radiographs and ultrasound can be used to confirm, as well as blood work to include canine pancreatic lipase immunoreactivity (cPLI). The significant role of nurses in caring for these patients, is in supportive care, which includes:

- Fluid therapy;
- Nutritional support;
- Analgesia;
- Possible plasma transfusion; and
- Possible feeding tube and nutritional requirements.

INFLAMMATORY BOWEL DISEASE

Inflammatory bowel disease (IBD) is the collective term that describes several intestinal disorders associated with

chronic inflammation of the small and/or large intestine. There is no known cause as to why patients have it, however, there are some contributing factors:

- Dietary;
- Genetics;
- Bacterial; and
- Parasite sensitivity.

IBD can vary, and it is important to look for symptoms like:

- Melena;
- Vomiting (can be intermittent);
- Weight loss;
- Depression;
- Haematochezia;
- Anorexia; and
- Pyrexia (in severe cases).

Sinead emphasised that the combination of blood work, abdominal ultrasound, and faecal examinations can help diagnose these however to definitively diagnose IBD, it is necessary to carry out endoscopic biopsies of the stomach, duodenum, colon, and rectum (less invasive than surgical biopsies). However, sometimes we need to obtain full thickness surgical biopsies via exploratory laparotomy.
IBD cannot be cured but can be controlled with strict adherence to diet and medication protocols. This will provide the best quality of life for the patient.
After lunch the practical session began with a table showing the different feeding tubes including:

- A simple nasogastric feeding tube;
- Oesophageal feeding tube (O tube);
- Percutaneous endoscopic gastrostomy ([PEG] – endoscope required for this feeding tube);
- By using model dogs, Sinead showed how feeding tubes were placed, and also displayed the other simple instruments required to place tubes. This gave delegates a chance to observe how these tubes were placed and maintained.

Also, during this period, Sinead discussed case studies from patients presenting to the clinic right through diagnostic and discharge, focusing on the nurse's role in each case.