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MANAGING THE CONSTIPATED CAT

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‘Doctor, my cat can’t take a DUMP!’ is the anguished complaint of the owner of the constipated-cat that we all recognize as one of the all too common small animal practice presentations.

Whether this is the first presentation or just the latest in a long series of episodes, it is important that instead of simply reaching for the nearest symptomatic management we search for an underlying cause of the large bowel dysfunction that has resulted in prolonged transit time. The colon serves several functions including resorption of water, electrolytes and volatile fatty acids as well as the temporary storage of feces. Although the colon will happily cope for several days as a ‘waiting room’ for feces, prolonged periods of storage are not normal and lead to the removal of excessive amounts of moisture from the fecal bolus with consequent concretion. It is unclear whether repeated episodes of fecal concretion alone can lead to colonic dysfunction but there is no doubt that the lower bowel of the cat is particularly prone to the development of the irreversible dilatation and loss of motility that we term ‘megacolon’. Ultimately, therefore such individual obstructive episodes may be the forerunner of something more serious and permanent and deserve thorough investigation and specific management.

ETIOLOGY

There several possible causes of fecal retention that are capable of progressing to chronic colonic dysfunction, including:

- Congenital anomalies
- Neurological disease or injury
- Obstructive causes
- ‘Idiopathic’ causes
- Environmental alterations

Congenital anomalies that lead to defecatory dysfunction are uncommon but include

- segmental aganglionosis
- situs inversus
- lumbosacral anomalies (e.g. Manx conformation, meningocoele)
- anorectal agenesis

Patients are usually presented in the first few weeks of life with what may be severe fecal retention and often abdominal distension. The colonic dysfunction is normally complete and there is usually little prospect of medical management.

Neurological disease or injury that results in sacrococcygeal damage is encountered after ‘tail-pull’ trauma or road traffic incidents. Although the most obvious lesion may be dislocation of the tail at the sacro-coccygeal level there is often unseen accompanying damage to the cord further cranially. Fecal dysfunction is one possible manifestation of this injury as well as urinary retention. Many cases can be successfully managed pending the resolution of bruising within the cord but those that remain dysfunctional by 6 – 8 weeks will often have permanent damage.

Obstructive causes include pelvic fracture mal-unions that result in reduction of pelvic diameter. Often relatively minor compression of the pelvis can impede fecal motility and rapidly lead to the development of megacolon. Despite the temptation to consider orthopedic revision, it is worth bearing in mind that even after what may be a near perfect pelvic reconstruction the loss of colonic function will still persist. A more effective management is therefore sub-total colectomy alone. Not only does this remove the affected section of large bowel but results in softer fecal boluses that progress without difficulty through the pelvic region.

‘Idiopathic’ is a term that usually can be interpreted as ‘I really haven’t got clue what caused this’. We certainly recognize a sizeable group of older, often oriental cats that present with repeated episodes of fecal retention and group them as ‘typical idiopathic megacolon’ patients. ‘Idiopathic’ has become a very convenient category in which to lump together all of the case of constipation / megacolon that we simply have yet to find a cause for. In many cases it may be difficult to identify the change in the bowel as a primarily neurological or muscular disorder. There is considerable evidence to suggest that at least some of these cats may have chronic / sub-clinical inflammatory bowel disease and certainly patients with IBD appear at risk of developing impaction.

Environmental alterations may be important in some cats. Certainly, many cats have fastidious toileting patterns and disruption of these habits through peer or environmental pressure may result in prolonged intervals between defection. Just as social intimidation leading to urinary retention as one of the possible causes of FLUTD, so it may contribute also impact colonic function.

CONSERVATIVE / MEDICAL MANAGEMENT

There is of course, a wide range of conservative and medical options for management of constipation that we usually explore before considering more drastic surgical solutions. Options for this route include:

Environmental: Providing additional litter trays in the household or identifying social confrontation in outdoor cats may be helpful for some cats that are selective about their defecatory pattern.

Bulking agents: Materials that increase the volume of the fecal bolus can be effective where some lower bowel tone is still present. Natural products such as sterculia and ispaghula husk are ideal in this respect although not always a palatable option for many cats.

Laxatives: ‘Over the counter’ laxatives may not provide the simple solution that they appear to do. ‘Lubricating’ products such as liquid paraffin tend to coat the fecal bolus reducing surface frictional resistance but at the same time tending to solidify the content and actually worsen any impaction. Agents such as Lactulose (0.5 – 5ml p.o. q8 – 12h)) on the other hand, retain water in the intestinal lumen and reduce transit time more effectively by increasing the moisture content of the feces.
Prokinetics: Drugs that promote smooth muscle tone should be used with caution, particularly in cases where there is an obstructive cause of the constipation of fecal material provides a firm obstruction. Cisapride (0.1 – 1.0 mg/kg p.o. q8 – 12 h) and bethanechol chloride (0.1 – 0.2 mg/kg p.o. q8h) are increasingly difficult to obtain but may be helpful in some selected cases of recurrent constipation.

Enemas: Enemas will be used at some stage in the management in almost all cases of lower bowel impaction. Soapy solutions are a safe option but rely on a volume effect to promote dissolution and motility. Phosphate enemas should be avoided in the cat because of the possibility of fatal hypocalcemia / hyperphosphatemia. Citrate containing micro-enemas are suitable but should be avoided in patients in which there is any suspicion of inflammatory bowel disease.

Surgical Management (Partial Colectomy)
Fortunately, none of the functions of the feline colon are specific to the lower bowel allowing us the option of resection of the diseased section. Near complete removal of the colon (sub-total resection, STC) is a highly effective management option for irreversible megacolon that is refractory to medical management strategies. Patients should be selected with care so as to rule out co-existing disease that may increase the risk of peri-operative complications. Options during surgery include salvage of the iliocecal junction with its vascular supply and salvage of some of the distal colon to facilitate anastomosis. Cats should be encouraged to feed as soon as possible postoperatively to promote intestinal motility. Temporary constipation is a possible complication after surgery and may be caused through simple discomfort, persistence of a rectal bolus after surgery or lack of opportunities for defecation in a conductive environment – usually not a hospital ward cage. The prognosis after STC is excellent although many owners still entertain concerns regarding defecatory frequency and continence. Contrary to the commonly-held myth, STC does NOT result in either diarrhea or fecal incontinence. Cats that exhibit either of these signs after surgery deserve specific work up since this may be the result of other concurrent problems such as inflammatory bowel disease or neurological damage.