SCIENCE OF SLOTHS
Sloth Case Information

Case reference name: LPZ CASE

Name/position of contact: Kate Gustavsen, Ph.D., D.V.M., Dipl. A.C.Z.M. Board Certified Specialist in Zoological Medicine(TM)

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Initial date of contact: by email to ddial@aqua.org on 5/11

Contact information: see above

Age (if known):

List all known diet items: Luigi consumed essentially nothing for 12 days I believe, from just after completing the course of florfenicol through his second transfaunation 12 May. Since that time he has voluntarily consumed water and a very few produce items out of his dishes overnight, and has taken modest amounts of a variety hand-fed fruit, veggies, and greens, and pretty good quantities of water from a syringe or spray bottle. I believe his consumption of biscuits and browse have been essentially nil. He has so far refused Critical Care from a syringe or left in a bowl for him to investigate. We haven't tried mixing with vegetable baby food, but he's also been uninterested in taking even fruit baby food or applesauce from a syringe so I don't have high hopes for a veggie/CC concoction.

Luigi has been defecating regularly since the fecal transfaunations – in fact more frequently, something like five out of the last seven days, but in smaller than typical amounts. So if there's obstruction, it would seem to be very intermittent. He did have one episode of somewhat softer, un-pelleted feces while he was receiving florfenicol, but all other feces has been pelleted and quite normal looking.

Under veterinarian care, if so who? Yes, Above

Chief complaint/reason of case review: **Deb, I unintentionally ignored the questions you asked in the first email because of those attachment issues, my apologies.**

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We did ultrasound at the first diagnostic exam 6 May after he started the bruxism, but that was the exam with what I thought was iatrogenic gas distension of the stomach from unsuccessful intubation, so the gas shadowing would likely have obscured a partially-obstructing item in the intestine. I can at least say that he didn't have large dilated bowel loops or obvious ileus at that procedure.

We're anesthetizing tomorrow for another transfaunation, fluids, and I'll be giving him a good volume of Critical Care by tube at that time as well. We were hoping to start an ongoing transfaunation with feces hidden in empty gelcaps in grapes on a daily basis instead of having to anesthetize for tube administration, but thus far his appetite hasn't picked up enough to be confident that we could do that without really putting him off if he bit into one of the capsules of feces. Maybe we'll get there after this procedure.

Thanks for all the brainstorming!
Kate

Hi all, I'm jumping in to answer Dr. Dominique's questions instead of relaying answers back through Jill and Dani. 😊 Since we sort of jumped in to the middle of the saga I'm going to go chronologically and try to fill in some info…

Abscess: Originated within the fold/pocket of buccal mucosa just in front of the left mandibular caniniform. No tooth/bone involvement but heavy growth of *Actinomyces* and this was the second abscess in the same location, so we were concerned that we'd eventually get osteomyelitis if residual bugs smoldered in the scar tissue. We used florfenicol because everything else on the (limited) list of susceptible antibiotics seemed like it would be even worse. He got four doses, four days apart, and the abscess itself looks to be completely healed, so probably not the source of pain.

Bruxism: Started a few days after the last dose of florfenicol. He was anesthetized on 5/6 for evaluation and supportive care. A lot of air in the stomach on rads, but I'd given a few breaths when the ET tube was actually in his esophagus. We gavage fed plant-based human enteric feeding formula and I heard air escaping, so I hoped I got rid of most of it and he'd eructate the rest.

Bloodwork: Sample taken 5/6, CBC (Idexx) had 8,000 total WBC, 26% neutrophils, 67% lymphocytes, but did have 1% bands. Chemistry normal. I took a small sample again 5/7 (see below) for iStat, and his lactate seemed high (5-something) but I wasn't surprised with the degree of gastric dilation then.

Scoping: The next day 5/7, distension got progressively worse. We anesthetized late in the day to decompress with visualization via scope. Very challenging! If you've scoped a sloth I'd love any input on positioning. I had him on his right side, with thorax elevated, because on radiographs the stomach seemed displaced to the left so I thought that would keep the gas "up" and accessible. I've attached radiographs from 5/6 and 5/7 including with the scope still in place after transfaunation, you can see we barely got in to the stomach. I was in a smallish chamber area and couldn't get any further because of thick fluid contents that I couldn't see through or suck up. As far as findings, we encountered a potential foreign body right at the entry to the stomach – or it may have been undigested wheat penne. Luigi was waking up and there was so much peristalsis I couldn't get it with the endoscope graspers. That said, I don't think the graspers we had available were robust enough to hold onto it anyway. I ended up dislodging and losing it in the liquid stomach contents. Nothing foreign-looking showed up on radiographs. You can see we did evacuate most of the gas. At the end of that procedure we did the transfaunation mixed with Critical Care Herbivore.

Meloxicam: If you've used it daily at 0.1 mg/kg rather than every other day we'll start doing that, thanks!

Gas-X: My understanding was that simethicone breaks surface tension such that small bubbles coalesce into large bubbles which can more easily be eructated (if stomach) or move through the intestine (if intestinal). Since Luigi already seemed to have one giant bubble, I didn't think that would help him get rid of it.

Bruxism has essentially ceased and he hasn't re-bloated that we can tell with limited palpation, which makes me wonder: 1) Was the gas on radiographs 5/6 not really iatrogenic, and we actually had unnoticed, increasing gastric dilation as the cause of pain in the days prior? 2) If so, why couldn't he eructate it out? Did he in fact have an obstruction at the esophageal sphincter? 3) If so, why was that not dislodged with the tube feeding on 5/6?

He's still not eating, so we're anesthetizing again tomorrow, hopefully briefly just to recheck radiographs for gastric dilation and do another transfaunation/feeding. I'm not *expecting* to scope again at that procedure, but if you do have any practical advice on that I'd love to have it for future!

Thanks!

Kate

Documents attached? Waiver provided ad sent un ddial for release of info to the team at SoS

Service provided?

Outcome: