Placement of a permanent coelomic catheter for the treatment of a chronic coelomitis in a green iguana (Iguana iguana)

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PLACEMENT OF A PERMANENT COELOMIC CATHETER FOR THE TREATMENT OF A CHRONIC COELOMITIS IN A GREEN IGUANA (IGUANA IGUANA)

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A female 4 year old green iguana (Iguana iguana) was presented at the Clinic for Zoo Animals, Exotic Pets and Wildlife, Vetsuisse Faculty, University of Zurich with signs of coelomitis following ovariohysterectomy. Besides anorexia the animal revealed hyperechogenic coelomic fluid during ultrasonography. Coelomic aspirate cytology showed signs of inflammation and microbacterial culture revealed haemolytic Escherichia coli. The iguana was treated with Meloxicam 0.1 mg/kg SID p.o. (Metacam®, Boehringer Ingelheim GmbH, Basel, Switzerland (CH)), Cefotaxim 50 mg/kg SID i.m. for 14 days (Claforan®, Sanofi-Aventis Deutschland GmbH, Frankfurt, Germany) based on antibiotic sensitivity testing and a saline-lavage of the coelomic cavity. The condition did not resolve and a coelioscopy was performed 43 weeks after initial presentation. A liver biopsy was collected and histology showed diffuse glycogen- and fat depositing in an early stage. During this examination yellow, colloidal fluid could be removed and the coelom was flushed again. The aerobic microbacterial culture did not show any bacterial growth. The animal was treated with Enrofloxacin 10 mg/kg SID p.o. for 14 days (Baytril 2.5 %®, Provet AG, Lyssach, CH). Since the general condition did not improve, it was decided to treat the coelomitis with a coelomic catheter 16 month after initial presentation.

Under general anaesthesia a skin incision was made in the left flank; a 16 Ch (5.3 mm x 182 mm) trocar catheter (Mallinckrodt® Medical, Athlone, Ireland) was advanced subcutaneously in cranial direction for 2 cm and then introduced into the coelomic cavity. Once in the cavity, the tube was placed in parallel again with the coelomic wall and further advanced cranio-ventrally for 9.1 cm. To ensure the correct positioning, dorso-ventral and latero-lateral radiographs were made. The tube was secured with a Chinese finger trap and fixed to the body with loose bandage. For 10 days, the coelom was actively drained and flushed with saline on a daily basis. Treatment involved Doxycyclin 50 mg/kg every 72 h i.p. (Vibravenös®, Pfizer AG, Zurich, CH), Sucralfat 250 mg/kg SID p.o. (Ulcogant®, Merck AG, Zug, CH), Cimetidine 4 mg/kg SID p.o. (Cimetidin-Mepha®, Mepha Pharm SA, Aesch, CH) and Meloxicam 0.1 mg/kg SID p.o. The coelomic tube was removed as the animal improved and the coelomic fluid became less in quantity and clear in its appearance. The animal was returned home with Marbofloxacin 5 mg/kg SID s.c. for 10 days (Marbocyl®, Vetoquinal AG, Ittingen, CH) and Amikacin 5 mg/kg SID s.c. for 5 days (Amikin®, Bristol-Myers Squibb SA, Baar, CH). A recheck 2 months later revealed that the iguana had recovered and appeared clinically healthy.

Coelomitis is a well-known problem in reptiles and described in iguanas in different case reports (GIBBONS and TELL, 2009; LOVE et al., 1996; SCHILLIGER et al., 2003; STACY et al., 2008). Depending on the aetiology, clinical signs can differ but are mainly non-specific and include lethargy, anorexia, cutaneous discoloration, and coelomic enlargement (STACY et al., 2008; STACY et al., 2004; WESTFALL et al., 2006). Active coelomic drainage with permanent catheters is often used in small animal surgery to treat peritonitis but to the authors knowledge have not been reported in reptiles (FOSSUM, 2007). In this case the surgical treatment with a coelomic drain provided an appropriate management of a chronic coelomitis. The comparative ease of the procedure makes it a practical treatment choice in cases where conservative treatment alone does not result in success.
References