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## Surgical management of dystocia in a Rottweiler

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### Abstract

In the present study, a Rottweiler aged 3yrs and weighing 25 kilograms was presented with dystocia due to primary uterine inertia and was treated by caesarean section to remove one live pup and the patient went on to make an uneventful recovery. Dystocia is a common small animal emergency. Bitches that have been in prolonged labour, those with a uterus containing dead or decaying foetus or a friable uterus or those showing signs of endotoxaemia or septicaemia are advised for caesarean section. Caesarean section should be performed before the dystotic bitch fatigues or distress occurs to the pups. For caesarean sections, safe anaesthetic protocols that exert minimal side effects on foetus or pups should be selected by the clinician.

**Keywords:** Surgical management, dystocia, caesarean section, uterine inertia

### Introduction

Dystocia refers to difficult birth or inability to expel the fetus through the birth canal without assistance. Dystocia is a common emergency in canine patients. A caesarean section is major surgery performed to remove puppies from uterus (Arthur, 1986) [1]. A 3 year old Rottweiler dog was presented with hanging water bag and greenish discharge from vulva. Animal exhibited severe straining for last 5 hours, and delivered 3 dead puppies. Animal continued to show straining for more than 2 hours without delivery. On clinical examination animal revealed a rectal temperature of 101.2<sup>0</sup> F. Body weight of the animal was 25 kg. On per vaginal examination bony prominence could be detected at the pelvic brim. Administered Oxytocin injection and animal delivered 2 puppies. No further straining observed and on ultrasonography foetal heart beat could be detected and was decided to perform caesarean section.

### Surgical management and medicinal care

Animal was dull and dehydrated, stabilized by giving 200ml of D10 i/v. Inj Ceftiofur 1.1 ml s/c, Inj Pantoprazole 6ml i/v. Animal was premedicated with Inj Atropine (.06%) 1.8 ml i/m. and Inj Xylazine 1 ml i/m. Induction was done by using Ketamine (5%) and Inj Diazepam (.5%) as 4 ml i/v. Anesthesia was maintained by using Propofol. Animal was positioned on lateral recumbency (fig1a.) Draped the site and secured it using towel clamp. Made a 5 inch long linear skin incision in middle upper flank (fig1b) using No:10 BP blade loaded on BP handle no:3. Extended the incision using double blunt Mayo scissors. Bluntly separated the subcutaneous tissue using Mayo blunt scissors. incised obliques abdominis externus, obliques abdominis internus, transverse abdominis muscles using BP blade no:10 and entered the abdominal cavity. Identified and exteriorised the gravid uterus and packed the abdomen with sterile mops. An incision was made on the body of uterus and milked out the foetus present in left horn (fig1c.). Removed the foetal membranes and closed the uterine incision using vicryl (1-0) in Cushing followed by Cushing pattern(fig1d). Muscles were apposed by continuous interlock suture using vicryl (1-0). Subcutis was sutured with vicryl (1-0) in subcuticular pattern. Skin was apposed with Intradermal sutures(fig1e) using vicryl (1-0). Dressed the site using tincture benzoin and applied abdominal bandage.

### Post-operative care and management

Animal was kept lying with its head and neck extended until recovery from anaesthesia.

Puppies were fed with colostrum .Given Inj Ceftiofur 1.1 ml s/c, Meloxicam 1 ml i/m. Continued wound dressing using Neosporin powder and antibiotic injection for 5 days. Advised bland diet for 3 days.

### Discussion

In the present case under study, animal showed restlessness, refusal of food, vomiting and gazing at flank as symptoms of difficulty whelping agreeing with the observations stated by Freak (1975) [2]. As described by Concanon (1986) [3] two days prior to parturition the bitch became restless, it showed reduced food intake, during twelve to twenty four hours prior to parturition there was an increased restlessness, panting, scratching, chewing and nesting behavior as reported by the owner. Linde and Entroth (2000) [4] observed a decline in rectal temperature below 99.7°F indicated that parturition will take place within next twelve to twenty four hours. In the present case, the rectal temperature of animal was 101.2°F. Roberts (1986) [5] pointed out that brachycephalic breed with broad heads are more prone to dystocia. The presented animal was a Rottweiler, which is a brachycephalic breed. Krzyzanowski *et al*, (1975) [6] opinioned that the interval from day of mating to day of parturition may vary from 58 to 72 days in normal bitches of all breeds. In this case animal showed signs of parturition on 60th day of mating. Cause of dystocia may be maternal or foetal. Walett and Forsberg (1994) [7] in a study found that 75% of the causes of canine dystocia is of maternal origin. In the presented case also the dystocia was of maternal origin.



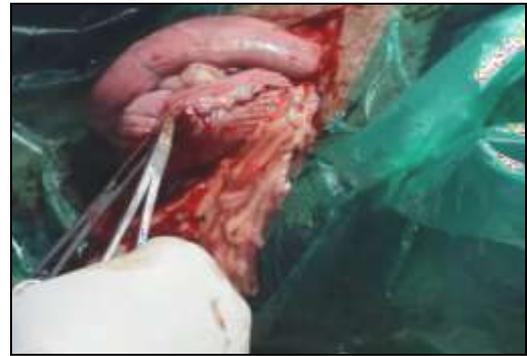
**Fig 1a:** Animal on lateral recumbency



**Fig 1b:** Line of incision



**Fig 1c:** Milking of puppy



**Fig 1d:** Closing uterus



**Fig 1e:** Closure of skin



**Fig 1f:** Surgically removed live puppy

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