A case report: An unusual dystocia in an Arabian camel with uterine prolapse

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Abstract

A seven year old female camel was presented with a history of dystocia and uterine prolapse. The prolapse was extensive hence the dead fetus was removed by cesarean section using left lower flank laparohysterotomy. The uterus was replaced back and the vagina was sutured using umbilical tape. Post-operative care comprised of administration of antibiotics and anti-inflammatory drugs along with vitamin supplements and intra uterine therapy. There was an uneventful recovery. It was concluded that cesarean section should be performed in complicated cases of uterine prolapse in camel with concomitant dystocia.

Key words: Camel, cesarean section, dystocia, prolapse.

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Introduction

Sporadic cases of dystocia in camels have been reported by several researchers in camel raising countries (Gera and Datt, 1981; Elias, 1991; Purohit et al., 2000). More recently, a few studies have shown analysis of 27 (Van Straten, 2000), 14 (Purohit et al., 2011a) and 56 (Al-Juboori and Baker, 2012a) dystocia in camel, pointing out that fetal causes of dystocia predominate in camels. The maternal causes of dystocia seen for camelids include uterine torsion, pelvic immaturity, uterine inertia and cervical dilation failure (Purohit, 2012). Although uterine prolapse has been recorded in camel (Ramadan and Hafez, 1993; Maart, 1996; Gutierrez et al., 2001; Al-Juboori and Baker, 2012), it is usually seen as a complication of parturition, especially subsequent to excessive obstetric manipulation and its association with parturition is not frequent. This report puts on record a case of uterine prolapse in Arabian camel with resultant dystocia that was corrected by laparohysterotomy.

Case history and treatment

A 7 year old female Arabian camel was presented to the Al-Qattara Veterinary Clinic, United Arab Emirates with a history of intermittent straining and non-delivery of the fetus. On clinical examination it was found that most of the uterus prolapsed out the vagina (Figure 1). Careful examination of the uterus revealed that the uterus was edematous with some lacerations on the mucosal surface. The fetus was located in the abdomen and no parts of the fetus were palpable within the prolapsed uterus. A part of the placenta was felt. The extraction of the fetus through the vagina appeared improbable hence a left lower flank laparohysterotomy was performed under sedation with 0.25 mg/Kg xylazine and local (Rompun) administered IV infiltration anesthesia as suggested previously (Purohit et al., 2011a, b). The gravid horn of the uterus was incised in the area of lower blood supply and a dead fetus with its placenta was removed. The uterus was sutured using 3/0 chromic catgut in a single layer of continuous inverting pattern using Utrecht method. The prolapsed uterus was washed with saline, followed by iodine solution and the torn mucosa was sutured using chromic catgut and then returned back to its normal position. The peritoneum and muscles of the abdominal incision were sutured employing continuous sutures using 3/0 catgut. The skin was sutured using silk. The vulvar lips were apposed with two horizontal mattress sutures using umbilical tape. During the operation intravenous fluid infusion comprised of approximately 7 liters

of normal saline and 3 liters of ringers lactate.

Post-operative care included the administration of antibiotics (Injection Oxyvet LA, ADWIA, Egypt: 20 mg/Kg IM for 5 days) and anti-inflammatory (Injection Artrivet, DFV, Spain: 20mL IM for 3 days) drugs along with vitamin supplements (Injection Ancesol, Richter Pharma, Austria: 20 mL IV for 3 days and Injection Combivit Norbrook, UK: 20 mL IV for 3 days). Fatroximin (Rifaximin. Fatro. Italy) intrauterine foam was infused thrice at 48 hours interval. The vulvar sutures were removed at 10 days post-operative whereas the skin sutures were removed after 21 days of the operation. The animal had an uneventful recovery.



Figure 1. Camel with dystocia and uterine prolapse

Discussion

Several researchers indicated that manual correction of dystocia is more successful when cases are presented within 12 hours, whereas beyond this time cesarean section is a much easier and safer option with high dam survival (Purohit et al., 2011a). Manual replacement of uterine prolapse is possible in camel when the condition is noticed postpartum (Gutierrez et al., 2001) and camels are referred for therapy at an early time (Ramadan and Hafez, 1993; Van Straten, 2000) but replacement seems improbable if uterine prolapse occurs during parturition as observed in the present case.

Different anaesthetic combinations have been described for cesarean section in camels in the past including chloral hydrate (Petris, 1956; Rathore, 1962), premedication with chlorpromazine hydrochloride followed by a chloral hydrate and magnesium sulfate mixture (Sharma and Pareek, 1970), premedication with triflupromazene (Nigam et al., 1977). However, currently the use of xylazine as a sedative administered by intravenous route (Sharma et al., 1982; Purohit et al., 2000; Purohit et al., 2011a, b) along with local infiltration anesthesia is suggested. The dose of xylazine suggested for camels is 0.25 mg/Kg (Sharma et al., 1982; Ali et al., 1989; Al-Juboori and Baker, 2012b). Camels can be safely sedated at this dose of xylazine.

It was concluded that cesarean section should be performed in complicated

cases of uterine prolapse in camel with concomitant dystocia.

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