

## SOME TYPES OF DYSTOCIA AND THEIR IMPACTS ON THE VIABILITY OF FETUS IN IRAQI HEIFER COWS

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**ABSTRACT :** The study was conducted in Balad district, Saladin province in northern Iraq from 1/2/2018 to 1/6/2020. It includes: 94 heifers suffering dystocia. the heifers with difficult male births were 60 (63.83%), whilst the number of heifers with difficult female birth was 34 (36.17%). Heifers have difficult male births with anterior presentation of fetus were 40(66.67%), whereas heifers have difficult male births with posterior presentation of fetus were 20 (33.33%). 8 of difficult male births with anterior presentation of fetus heifers have constriction of birth canal(20%), 4 heifers have alive fetuses and (4) heifers have dead fetuses with no significant difference at ( $P<0.01$ ). 11(27.50%) heifers with difficult male births with anterior presentation of fetus have fetus head deviation to right, 9 of those fetuses were dead (81.82%), and 2(18.18%) were live, with significant difference between two categories at ( $P<0.01$ ). 7(17.50%) heifers with difficult male births with anterior presentation of fetus have fetus head deviation to left, 6 of these fetuses were dead(85.71%) and 1 (14.29%) was alive with significant difference between two categories at ( $P<0.01$ ). 4(10%) difficult male births with anterior presentation fetuses heifers have down head deviation to abdomen, 2 (50%) of those fetuses were alive and 2(50%) were dead and with no significant difference between them at ( $P<0.01$ ). 10(25%) of heifers with difficult male births with anterior presentation of fetus have relative oversized fetuses, 5 (50%) fetuses were dead and 5 (50%) were alive, with no significant difference between two categories at ( $P<0.01$ ). 18 heifers with posterior presentation difficult male births have extended hind limbs fetuses in the birth canal, 8(44.44%) of those fetuses were dead, while 10(55.56%) fetuses are alive with significant difference between two categories toward alive fetuses at ( $P<0.01$ ) and ( $P<0.05$ ). 2(100%) difficult male births with posterior presentation heifers have dog- sitting postured dead fetuses, with significantly difference toward dead fetuses at ( $P<0.01$ ) and ( $P<0.05$ ) in comparison with zero number of alive fetuses. The number of heifers have difficult female birth with anterior presentation of fetus and uterine inertia was 5(25%), 1(20%) fetus is dead and 4(80%) fetuses were alive with significant difference between two categories at ( $P<0.01$ ), whilst number of heifers with difficult female birth and anterior presentation of fetus and deviation of fetus head to the right was 10(50%), 8(80%) fetuses were dead and 2(20%) fetuses were alive with significant difference between two categories at ( $P<0.01$ ), number of heifers with difficult female birth and anterior presentation of fetus and deviation of fetus head to the left was 3(15%), 2(66.67%) fetuses were dead and 1(33.34%) fetus is alive, with significant difference between two categories at ( $P<0.01$ ). 2(10%) heifers with difficult female birth and anterior presentation of fetus have forelimbs deviation toward abdomen alive fetuses with significant difference to these fetuses at ( $P<0.01$ ). The whole number heifers of female difficult birth with posterior presentation of fetus and extension of hind limbs in the birth canal was 11(78.57%). 7(63.64%) fetuses were dead and 4(36.36%) fetuses were alive, with significant difference between two categories at ( $P<0.01$ ). whereas the heifers that have difficult female birth with posterior presentation and breech presentation and dead fetuses were 3(21.42%), with significant difference for these fetuses at ( $P<0.01$ ).

**Key words :** Fetus, female birth, dystocia, heifer cows.

### INTRODUCTION

Dystocia can be defined as inability of the cow to expel neonate through the birth canal from the uterus (Mekonnen and Moges, 2016). This condition happens as a result of problems related to the dam's uterus or birth canal, or to the fetus. It can take place in cases such as pelvic canal abnormalities, uterine inertia, oversize and mal dispositions of the fetus (Mekonnen and Moges, 2016; Yehualaw *et al*, 2017). Dystocia is

very important in the farm economy, in account of it is the major factor in calf mortality at or near birth (Bellows *et al*, 1987). In cattle the incidence of dystocia may reach 3.3%. It is highly incidence in dairy cattle in comparison with beef cattle (Roberts, 2004).

Dystocia, which emerges in the dam due to maternal factors, such as constriction of the birth canal or deficient expulsive forces. The constrictive forms of which the most important are pelvic inadequacies, incomplete dilation of