

GROSS PATHOLOGICAL CHANGES IN UTERINE HORNS OF BUFFALOES SLAUGHTERED AT HYDERABAD ABATTOIR

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ABSTRACT

Gross pathological changes in uterine horns of buffaloes slaughtered during 1994-95 in Hyderabad abattoir were studied. For this purpose, uterine horns of 100 female buffaloes of various age groups, including 35 heifers, 25 adults and 40 aged buffaloes were collected and examined for gross pathological lesions. The incidence of pathological abnormalities in uterine horns was 7.00 percent. Out of 35 buffaloes showed 2 (5.71 %) defective uterine horns and in similar way uterine horns revealed pathological changes as 12 and 5 percent in adults and aged buffaloes, respectively. Present study showed higher rate of incidence in adults as compared to heifers and aged buffaloes.

Key words: Buffaloes, Uterine horns, Pathological changes.

INTRODUCTION

Reproduction failure in buffaloes is a major problem both in rural and urban areas which results subsequently in heavy economic losses. There are certain common abnormalities in the uterus of the buffaloes though they are not interfering the health of living animals but lower the economic values by causing infertility (Kaikini, 1978). Some of these abnormalities which are found in female genitalia particularly in the uterine horns are metritis, endometritis, pyometra and hydrometra are common (Kumar and Singh, 1985; Khan *et al.*, 1989). Actually most of the buffaloes which are brought to the abattoir for the purpose of slaughtering are due to over age or due to the sterility or infertility. The present study was, therefore, under taken to study the gross pathological changes in the uteri of buffaloes slaughtered at Hyderabad abattoir.

MATERIALS AND METHODS

Uterine horns of 100 female buffaloes of various age group viz, heifers, adults and aged buffaloes were collected from slaughter house, Hyderabad. The samples of each animal collected from different age groups were put in separate plastic bags and brought to the laboratory for further pathological study which were carried out soon after receipt of samples.

The organs were placed on table in their natural position and external facia and tissues were removed. The gross pathological lesions present within and out side the uteri of affected animals were recorded.

RESULTS AND DISCUSSION

Genital organs of 35 heifers, 25 adults and 40 aged buffaloes were collected from Hyderabad abattoir and examined for gross pathological lesions of the uterine horns. The affected uterine horns were swollen, enlarged and congested. The incised endometrium revealed that the affected areas were congested and highly distended with exudative fluid in the lumen in some of the cases. The mucosa was thickened and haemorrhagic in certain cases but still some showed creamy coloured pus. The surface in some cases showed congestion with haemorrhagic appearance alongwith transparent mucoid fluid in the lumen.

Out of 35 buffalo heifers, 2 (5.71%) showed pathological disorders in case of uterine horns, whereas pathological variations recorded in adults were 3 (12.0%) cases and in aged groups of animals 2 (5.0%) cases. Over all pathological lesions affecting uteri were 7.00 percent in all age groups of buffaloes (Table 1). The frequency of diseased uteri in the present study was lower than 19.68 percent in Berari buffaloes (Kaikini, 1978). These findings, however, were also lower than 48.0, 78.8 and 43.65 percent as reported by Dwivedi and Singh (1971), Vighio *et al.* (1981) and Khan *et al.* (1989). Such wide variation in the frequency of

Table 1: Incidence of uterine horns in different buffaloes age group

Age Group	No. of samples examined	No	Percentage
Heifers	35	2	5.71
Adults	25	3	12.0
Aged	40	2	5.0
Total	100	7	7.00

diseased organs could be due to climatic or managemental conditions.

The incidence of pathological lesions observed in uteri are presented in Table 2. The uterine horns of 35 heifers examined showed one (2.8%) case each of endometritis and mucometra bilaterally. The lesions of endometritis, mucometra and pyometra were recorded bilaterally in one (4%) case in the uterine horns of 25 adults buffaloes (Table 2). The uterine horns of 40 aged buffaloes revealed the lesions of metritis (2.5%) bilaterally and pyometra (2.5%) unilaterally.

The pyometra was recorded bilaterally in adult (4%) and aged (2.5%) buffaloes in the present study. Bhattacharya *et al.* (1970) and Vighio *et al.* (1981) have recorded much higher incidence. Grossly, the uterine cornua were dilated and doughy on palpations. The pus was either thin or thick with foul smelling odour. After evacuation, the endometrium appeared congested and haemorrhagic. Multiple necrotic areas along with erosions and ulcerations were obvious. Atonic, flabby and leather like pyometric uterine has been reported by Khan (1985) which has also been observed in the

Table 2: Incidence of lesions recorded in the uterine horns of different age groups of buffaloes.

Age group	Pathological condition	Affected Animals	Left Horns	Right Horns	Unilateral	Bilateral	Percentage
HEIFERS (n=35)	Endometritis	1	1	1	-	1	2.85
	Metritis	-	-	-	-	-	-
	Pyometra	-	-	-	-	-	-
	Mucometra	1	1	1	-	1	2.85
ADULTS (n=25)	Endometritis	1	1	1	-	1	4.00
	Metritis	-	-	-	-	-	-
	Pyometra	1	1	1	-	1	4.00
	Mucometra	1	1	1	-	1	4.00
AGED (n=40)	Endometritis	-	-	-	-	-	-
	Metritis	1	1	1	-	1	2.50
	Pyometra	1	1	-	1	-	2.50
	Mucometra	-	-	-	-	-	-

In the present study, the endometritis was found in 2.8 percent heifers, 4 percent in adults and no such lesion observed in aged buffaloes. The metritis was recorded to be 2.5 percent in case of aged buffaloes. Adult and aged buffaloes were suffering from pyometra at the level of 4.0 and 2.5 percent, respectively. Mucometra was observed as 2.85 and 4 percent in heifers and adults, respectively. Bhattacharya *et al.* (1970) recorded 7.65 percent endometritis and 2.29 percent pyometra. Much higher incidence of endometritis (13.93%) and mucometra (5%) has been reported by Khan *et al.* (1989). According to Khan *et al.* (1989) endometrial suffering uterine cornua were paretic and somewhat enlarged in size. In early cases the endometrium was congested and showed haemorrhagic spots. Similar lesions were observed in the present study. The incidence of pyometra as recorded in the present study was almost the same as recorded by Bhattacharya *et al.* (1970). Mucometra was observed 4.0 percent in adult buffaloes. The lower incidence of endometritis was recorded by Rao and Rajya (1976) as 0.80 percent. Kumar and Singh (1985) reported 34.6 percent incidence of endometritis in slaughtered adult buffaloes.

present study. The higher rate of incidence of pyometra was observed by Vighio *et al.* (1981) as 14.00 percent. All the variations in incidence of the lesions of uteri might be due to unhygienic conditions and rough handling during parturition and dystocia.

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