A Retrospective Study on Some Surgical Affections of The Perineum and Vagina in Farm Animals

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ABSTRACT

A total number of fifty one cases suffering from different surgical affections of the perineum and vagina were recorded**.** The recorded affections were mainly perineal, vulvar and/or vaginal neoplasms and perineal lacerations. However, other affections either congenital (as rectovaginal fistula and /or atresia ani) or acquired (Vaginal or uterine prolapse and Bartholin's gland cyst) were also recorded. Neoplastic masses of the perineum, vulva and vagina were recorded in twenty animals (7 cows, 6 goats, 2 mares, 3 donkeys, a buffalo, and one ewe). In cattle, squamous cell carcinoma was identified in 5 cows, while vaginal lipoma as well as vulvar fibrosarcoma was identified in only one cow. The only recorded mass in buffaloes was perineal fibrosarcoma. Out of the six neoplasms identified in the perineum in goats, 5 were melanomas, and only one was squamous cell carcinoma. In sheep, the only recorded mass was squamous cell carcinoma. While both of squamous cell carcinoma and melanoma were recorded equally in horses (one case each), the identified masses in donkeys were fibroma (two cases) and fibrosarcoma (one case). The clinical symptoms, surgery, recurrence and metastasis of these masses were studied and discussed. Third degree laceration was recorded in six animals (4 mares and 2 cows) and corrected by using the modified Goetze technique of the single stage repair (Interrupted six-bite vertical mattress pattern). The surgical outcome was recorded and interpretated. Some other conditions as Bartholin gland cyst (one case), atresia ani with or without rectovaginal fistula (5 cases), vaginal prolapse (5 cases), uterine prolapse (4 cases) and wounds and lacerations (10 cases) were also recorded.

INTRODUCTION

Surgery of the perineum and vagina should be done to restore the fertility of the animal rather than to achieve cosmetic effect. Injuries due to parturition and breeding, and the resultant complications, constitute the majority of indications for surgical management of problems of the perineum and vagina ***(1,2)***. In addition, neoplasms, congenital anomalies and the physical alterations of the region from repeated parturitions round out a substantial list ***(1)***.

Tumors of the vulva, vagina and perineum are not uncommon in cattle; squamous cell carcinoma, fibromas, fibropapillomas, and fibrosarcomas are the most commonly recorded ones **(3).** However, leiomyomas, leiomyosarcomas, melanomas, hemangiomas, and lymphosarcoma have been also described ***(3, 4).*** Squamous cell carcinoma is the most frequent neoplasm in cattle and its usual locations are the eye and the vulva ***(5).*** Clinical cases of vulvar squamous cell carcinoma have not been as widely reported as those of ocular squamous cell carcinoma in cattle ***(6)***. On the other hand, buffaloes are rarely affected with malignancy ***(7)***. However, a case report of cutaneous fibrosarcoma was recorded earlier in a buffalo ***(8).***

Caprine and ovine perineal and vaginal tumors are rarely recorded ***(9,10)***. In goats, both of melanoma and squamous cell carcinoma are rarely reported affecting the vulva and perineum ***(9)***. Angro goats appeared to be predisposed to melanoma ***(9,11)***, which occur in adult to aged animals with no sex predilection and the predilection sites are mostly the perineum and the dorsal surface of the pinnae ***(9)***. Melanomas in goats were reported to be highly malignant and carried poor prognosis ***(12)***. In horses, melanomas and squamous cell carcinomas are among the most frequent recorded tumors and the risk of melanomas increase in old grey horses ***(11,13).***

Rectovestibular trauma occurs in many species but is more commonly reported in mares than in most domestic animals because of the explosive nature of their parturition ***(1,14)***. Perineal lacerations have been classified into first, second and third degree lacera-

tions, based on the extent of the laceration ***(1,2,14, 15, 16)***. Third degree rectovestibular lacerations occur when there is tearing through the rectovaginal septum, musculature of the rectum and vagina, and the perineal body ***(16)***. It usually allows fecal contamination of the vagina, cervix and uterus with subsequent infection ***(14, 15)***. It is rare in cows owing to their less violent explusive efforts at parturition ***(17,18).*** Numerous surgical techniques for correction of third degree lacerations have been reported including one stage ***(1, 17-20)*** and the two-stage procedures that mainly differ in suture pattern and staging ***(15, 21)***.

The aim of this study was to record the most commonly encountered surgical problems of the perineum and vagina in farm animals that are presented to the surgery clinic, as well as their surgical management and to compare the result with other reported data.

MATERIALS AND METHODS

A total number of fifty one cases suffering from different surgical affections of the perineum and vagina were recorded over almost two years period along this study (Table 1). A complete case history and clinical examination for each case was reported. The animals were sedated with Xylazine hydrochloride solution (Rompun, Bayer) in a dose rate of 0.05 mg/kg b.w. for cattle, buffalo, and goat; 0.2 mg/kg for sheep and 1 mg/kg for horses and donkeys. Either posterior epidural analgesia (for horses, donkeys, cattle and buffaloes) or lumbosacral epidural analgesia (for sheep and goat) using 2% lignocaine HCL solution was also applied

After adequate preoperative procedures, the identified masses were excised and hemorrhage was controlled by electrocautery, pressure and/or ligation. Cutaneous and mucous membrane defects were sutured by silk or chromic catgut respectively using simple interrupted stitches. Specimens from the neoplasms were fixed in 10% formalin solution. Five micron thick paraffin sections were prepared, stained with hematoxylin & eosin and examined microscopically. Follow up of these cases was carried out for a period ranged between two to five months.

Surgical interference for third degree perineal lacerations was postponed up to 6-8 weeks after the injury. Perineal laceration in mares and cows were corrected in the standing position of sedated animals under the effect of posterior epidural analgesia using 10 -12 ml of 2 % lignocaine HCL solution. The site was prepared for aseptic surgery and a rectal tampoun was inserted to minimize fecal contamination. The anus and vulvar lips were retracted with stay sutures or clamps. The rectovestibular shelf was dissected through incising the junction between the rectal and vestibular mucosa. The division was made to create a slightly thicker rectal flap than the vaginal flap. The dissection was continued along the sides of the defect at the junction between rectal and vaginal mucosa. At least 3-4 cm flap (in a horizontal plane) was created to allow suturing without tension. The lacerations were corrected by using the modified Goetze technique of the single stage repair (Interrupted six-bite vertical mattress pattern) ***(1, 14)*** Suturing was adopted by using no 1-2 vicryl (Polygalactin 910). Postoperative care including anti-inflammatory, antibiotics and anti-tetanic serum (for mares) administration and dietetic correction were applied.

Atresia ani, rectovaginal fistulae, vaginal injuries and Bartholin gland cyst were corrected on the classical surgical principles. Prolapse of the vagina and/or uterus was corrected by Buhner method ***(1)***.

RESULTS

Perineal and Vaginal Masses

Masses involving the perineum, vulva and vagina were recorded in 20 animals (7 cows, 6 goats, two mares, three donkeys, one buffalo, and one sheep) (Tables, 1 & 2). In cattle, squamous cell carcinoma was identified in 5 cows, while vaginal lipoma as well as vulvar fibrosarcoma was identified in only one cow each. The only recorded mass in buffaloes was

perineal fibrosarcoma. Out of the six neoplasms identified in the perineum in goats, 5 were melanomas, and only one was squamous cell carcinoma. In sheep, the only recorded mass was squamous cell carcinoma. While both of squamous cell carcinoma and melanoma were recorded equally in horses (one case each), the identified masses in donkeys were fibroma (two cases) and fibrosarcoma (one case).

Table (1): Distribution of the recorded perineal and vaginal affections in farm animals.

No	Surgical Affection	No of the encountered animals
1	Perineal, vulvar and vaginal Neoplasms	20
2	Third degree perineal lacerations	6
3	Atresia ani and rectovaginal fistulae	5
4	Vaginal Wounds and lacerations	10
5	Vaginal and uterine prolapse	9
6	Bartholin's gland cyst	1

Squamous cell carcinoma (SCC) was seen in eight animals (5 cows, one mare, one sheep and one goat). Squamous cell carcinoma in cows were sessile, diffuse, ulcerative, and involved the vulvar lips (Fig 1, a, b & c). None of the these masses was extended to involve the external urethral orifice. SCC in the sheep and goat was also diffuse and sessile but involved the anus as well as the perineum (Fig 1, d). In the mare, SCC appeared as a fingure like mass projecting from the vulvar lip. All of these masses didn't show metastasis to the regional lymph node. After surgical excision, none of them showed any sign of recurrence after a period of observation ranged from two to three months. Histopathological examination of these masses (Fig 1, e) revealed the picture of SCC as wavy patterns of fibroblasts with pleomorphism, hyperchromatosis and nuclear activity.

Melanomas were recorded in six animals (five goats and one mare). In goats, the masses were dark brown, nodular and non ulcerated (4 cases, fig 2,a) or uneven and ulcerated (one case, fig 2 b&c). The masses in goats involved the perineum and vulva, and extended to involve the floor of the vagina in only one case. The cut sections of the excised masses were firm and dark brown in all except one case. Surgical excision in four cases was curative after follow up for a period ranged from two to four months. However, the case that involved the floor of the vagina showed recurrence after three months with extension of the mass to the floor of the rectum. Histopathological examination of the masses in four goats revealed the picture of melanoma, while the fifth case showed the picture of amelanotic melanosarcoma that revealed aggregated masses consists of melanoblasts deprived of melanin pigments. The neoplastic cells were embedded in the fibrous tissue. The recorded melanoma in the mare (Arabian, 12 years old) was nodular and the covering skin was intact. The mass was spreading in the perineum and extended to the base of the tail (Fig 2, d). Clinical examination showed metastasis of the mass to the periocular region and the base of the ear. Excision of a piece of the mass for its histopathological examination revealed the picture of malignant melanoma which characterized by the presence of aggregated masses consisted mainly of melanoblasts. The neoplastic cells were embedded in the fibrous tissue (Fig, 2,e). The nuclei showed polymorphism and vascularity. The neoplasm showed also lobulation. The mare was euthanized due to the spreading nature of the neoplasm.

Vulvar fibromas were seen in two donkeys, both of these masses were small, circumscribed and solitary (Fig 3, a). The cut section of the excised masses revealed firm yellowish white tissue. Moreover, fibrosarcomas were recorded in three animals (a cow, a buffalo and a she donkey). In the cow (Friesian, 3 years

old), a fleshy finger like mass (4 cm x 3 cm) was protruding from the ventral comissure of the vulva. This mass was previously excised and reoccurred after two months. However, no signs of metastasis were seen. In a buffalo (4 years old), a large egg like mass adhered to the perineum and base of the tail was recorded (Fig 3, c). The covering skin was intact. After excision, the cut section revealed grayish white tissue of hard consistency without cavity. The recorded fibrosarcoma in the she donkey (6 years old) was diffuse, ulcerative, and irregular, and involved both of vulva and perineum. Surgical excision of fibrosarcomas in these three animals was curative, up to three to five months following surgery. The cases were recovered successfully without recurrence. Histopathological examination (Fig 3, d) showed that the tumor cells consisted of interwoven bundles of fibroblasts with variable amounts of collagenus fibrous tissue. The tumor cells were ovoid in shape and the nuclei were hyperchromatic with distinct mitotic figures.

Vaginal lipoma was recorded in a 5 years old Friesian-Holstein cow, which had calved normally 9 days before presentation to the clinic. The case history denoted an intermitting straining and protrusion of a vaginal mass. Vaginal examination revealed a large, round, pedunculated, orange like mass originated from the dorso-lateral surface of the vaginal vestibule (Fig 4, a & b). The diameter of this mass was 9 cm x 6 cm. Concurrent vaginal and rectal palpation revealed absence of any attachment to the rectal wall. The mass was exteriorized and a gauze bandage was placed on the pedunculated part of the tumor to maintain its external position. The tumor appeared grossly as a capsulated mass covered with intact vaginal mucosa. After excision, the cut surface of the mass showed white yellowish multilobulated tissue.

Microscopically, the neoplastic fat cells were well differentiated and the fat complement was seen. Fibrous septa were observed dividing the neoplastic cells into lobules (Fig 4, c). Necrotic fat cells with inflammatory cells infiltration (mainly macrophages and lymphocytes) were detected.

Table (2): Distribution of the encountered perineal, vulvar and vaginal neoplasms according to species and location.

No	Type of Neoplasm	Site (s) Involved	Equine		Bovine		Ovine	Caprine	Total
			Horses	Donkeys	Cattle	Buffaloes			
1	Squamous cell carcinoma	Vulva, perineum	1	-	5	-	1	1	8
2	Melanoma	Vulva, perineum Anus, tail rectum	1	-	-	-	-	5	6
3	Fibrosarcoma	Perineum tail	-	1	1	1	-	-	3
4	Fibroma	Vulva	-	2	-	-	-	-	2
5	Lipoma	Vagina	-	-	1	-	-	-	1
Total			2	3	7	1	1	6	20

Perineal lacerations

First and second degrees of perineal lacerations were recorded in 10 animals (8 cows and 2 donkeys). These lacerations involved the vulva, vestibular and/or vaginal wall and not extended to involve the anus or the rectal wall. These lacerations were either superficially or involve the full depth (Fig 5). Third degree laceration was recorded in six animals (4 mares and 2 cows). Four of these animals (3 mares and one cow) were primiparous while the other two cases were multiparous. The cases were presented with a common opening between the vaginal vestibule and rectum. Feces were seen contaminating the vaginal cavity. Clinical examination revealed disruption of the perineal body, anal sphincter, floor of the rectum and roof of the vestibule and vagina (Figs 6 &7). The tear extended for a distance ranged between 8-16 cm long. The duration between injury and repair varied between 6 to 12 weeks.

Reconstruction was well performed in sedated animals under the effect of posterior epidural analgesia. All operations, except one, were successful after initial reconstruction. The only complication after repair of perineal laceration was partial dehiscence of the wound in one mare which necessitated another surgical correction.

Bartholin gland cyst

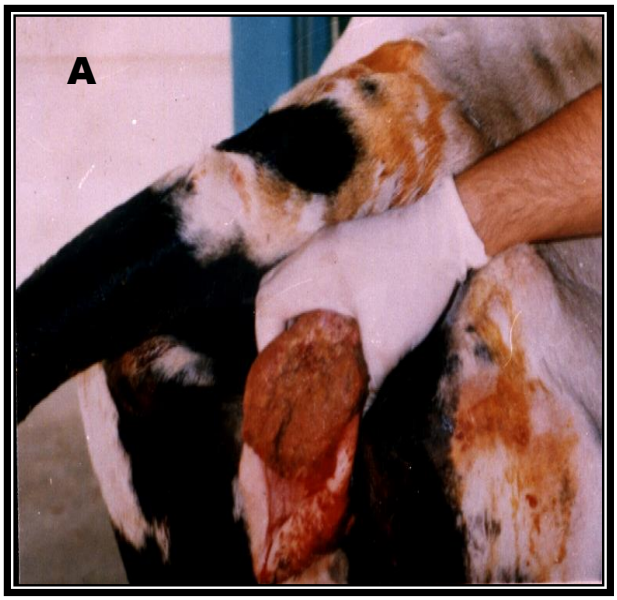
A Holstein Friesian cow of 4 years old, with abnormal egg like swelling noted at the vulva one month following calving was admitted to the clinic (Fig 8). The swelling was soft, fluctuating and non painful. The exploratory puncture revealed a clear viscid fluid. The case was diagnosed as Bartholin gland cyst. The cyst responded well to surgical extirpation with subsequent suturing.

Rectovaginal fistulae and/or Atresia ani

Atresia ani was recorded in 5 animals (3 Lambs, 2 kids). It was associated with rectovaginal fistula in three cases. Newly born animals with atresia ani ranged in age from one to three days old. These animals were suffering from absence of the anal opening, discomfort, tenesmus and perineal distension. Lambs with atresia ani and rectovaginal fistula ranged in age from three to six weeks. These lambs showed escaping of the feces from the vagina with absence of anal opening. Correction of the fistula and/or creation of anal opening in animals with atresia ani and/or rectovaginal fistula was successful in all animals.

Vaginal and uterine prolapse

Prolapse of the vagina was recorded in 5 animals (3 ewes and 2 does). All of these animals were multiparous. A rounded pinkish structure was protruding from the vulva (Fig 9,a). Surgical correction was uneventful in all cases. On the other hand, uterine prolapse was recorded in three ewe and one cow (Fig 6,b). While reduction was adequate in three cases amputation of the uterus was essential in an ewe.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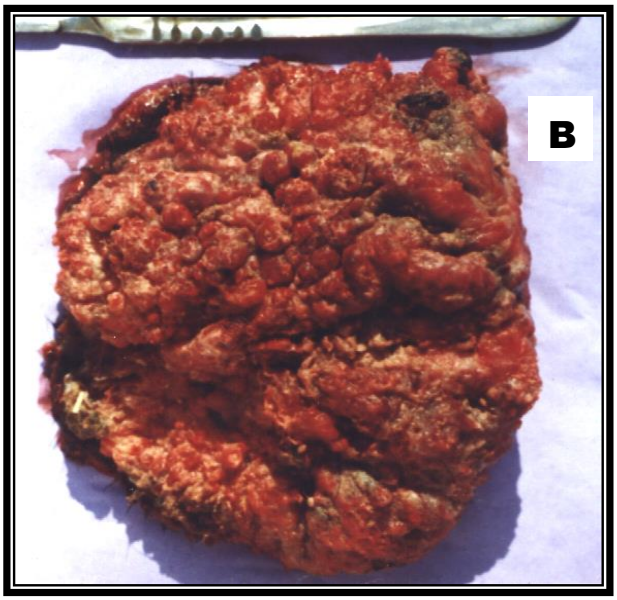
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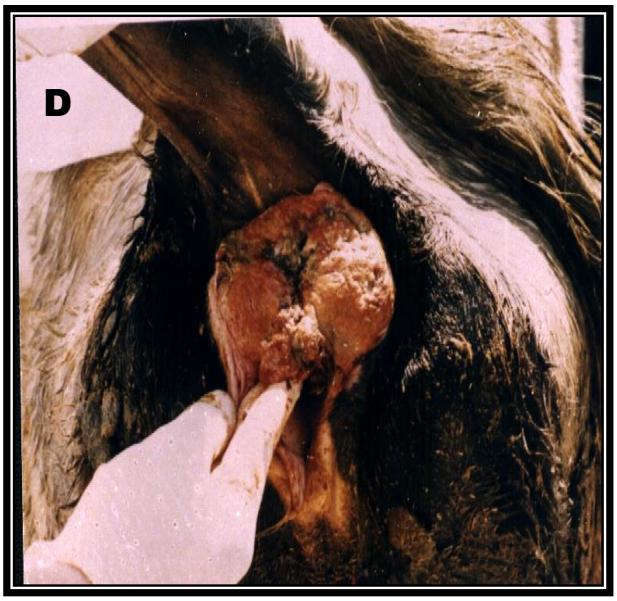
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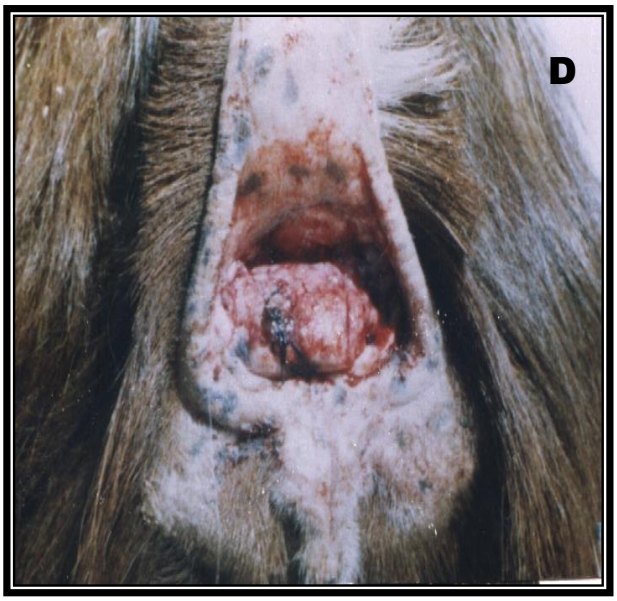
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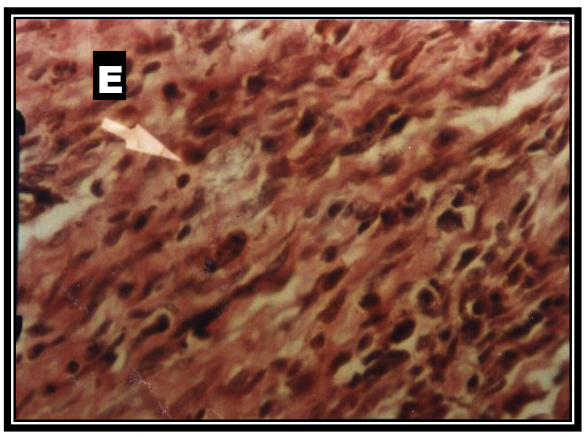
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Fig 1: SCC in a cow involving the vulvar lips (A), the mass after it's excision (B), SCC in another cow which extended to involve the perineum(C), SCC in a goat involving the perineum and anus (D), Photomicrograph of SCC illustrating the wavy patterns of fibroblasts (H&E, x 600) (E).

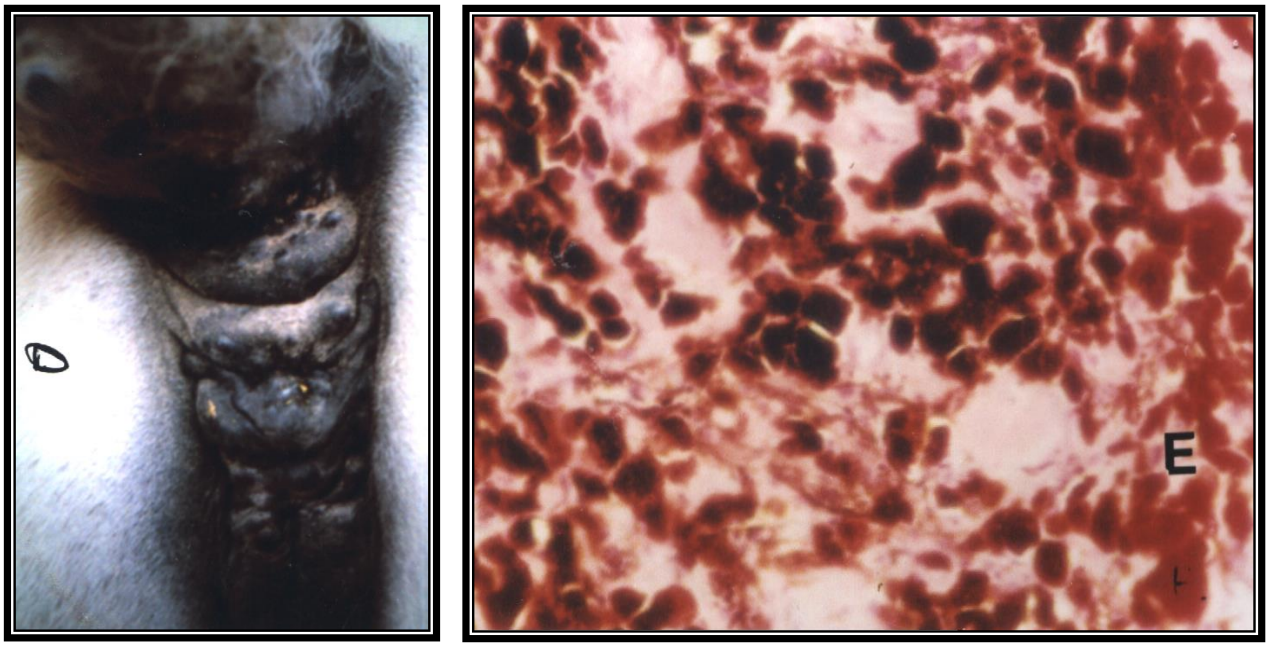


Fig 2 : A nodular nonulcerative vulvar and perineal melanoma in a goat (A), uneven ulcerative reddish amelanotic melanosarcoma involving the perineum and base of the vagina in a goat (B), the previ-

ous case after excision of the mass (C), malignant melanoma in a grey mare involving the perineum and base of the tail (D), Photomicrograph of malignant melanoma in a mare (E).

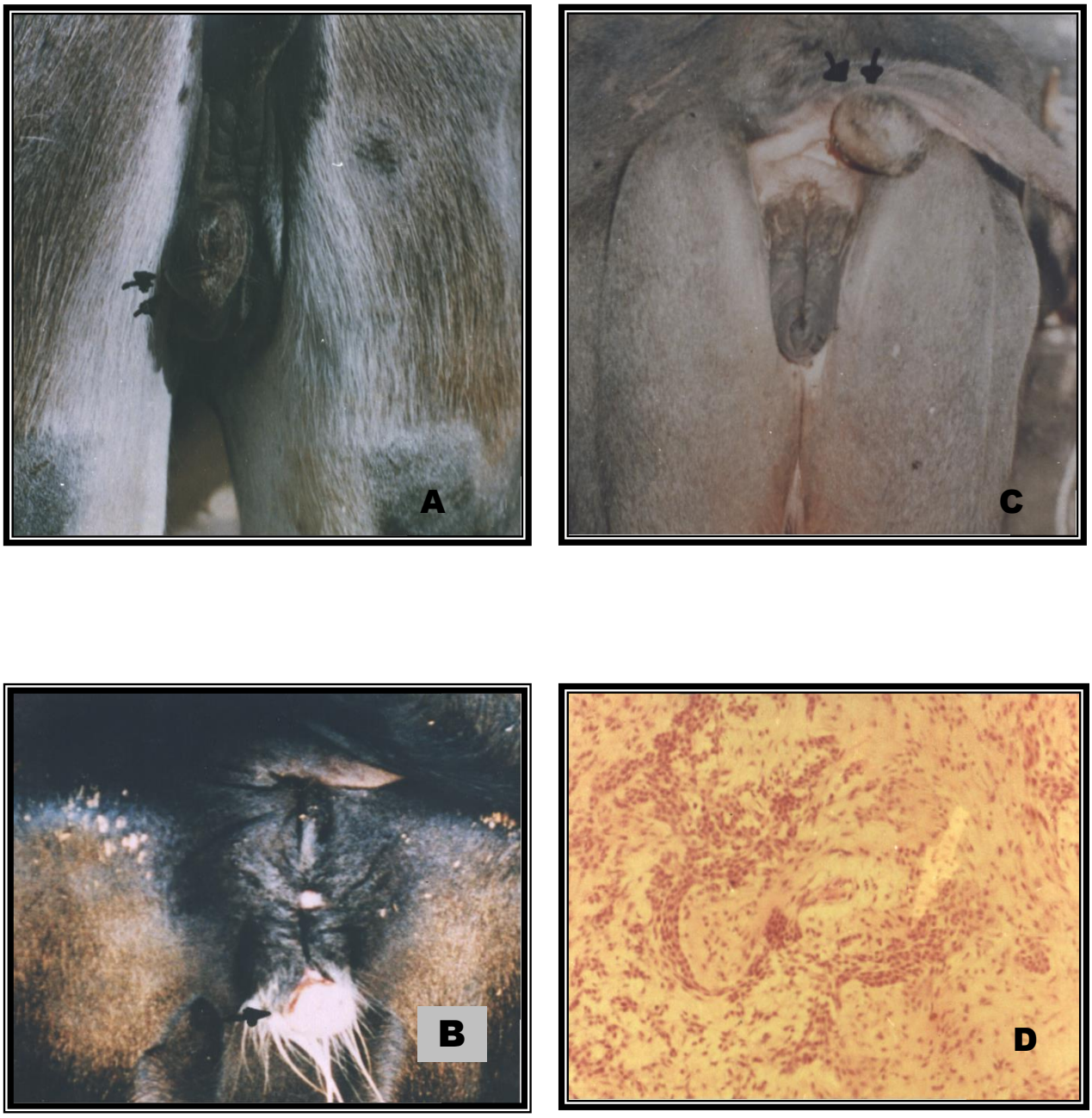


Fig 3: A solitary, circumscribed vulvar fibroma in a donkey (A), vulvar fibrosarcoma in a cow (B), Fibrosarcoma in a buffalo, notice the egg like swelling adhere to the perineum and base of the tail(C), Photomicrograph of fibrosarcoma in a buffalo, notice the hypercellularity and wavy whorled appearance (H&E, 150X) (D).

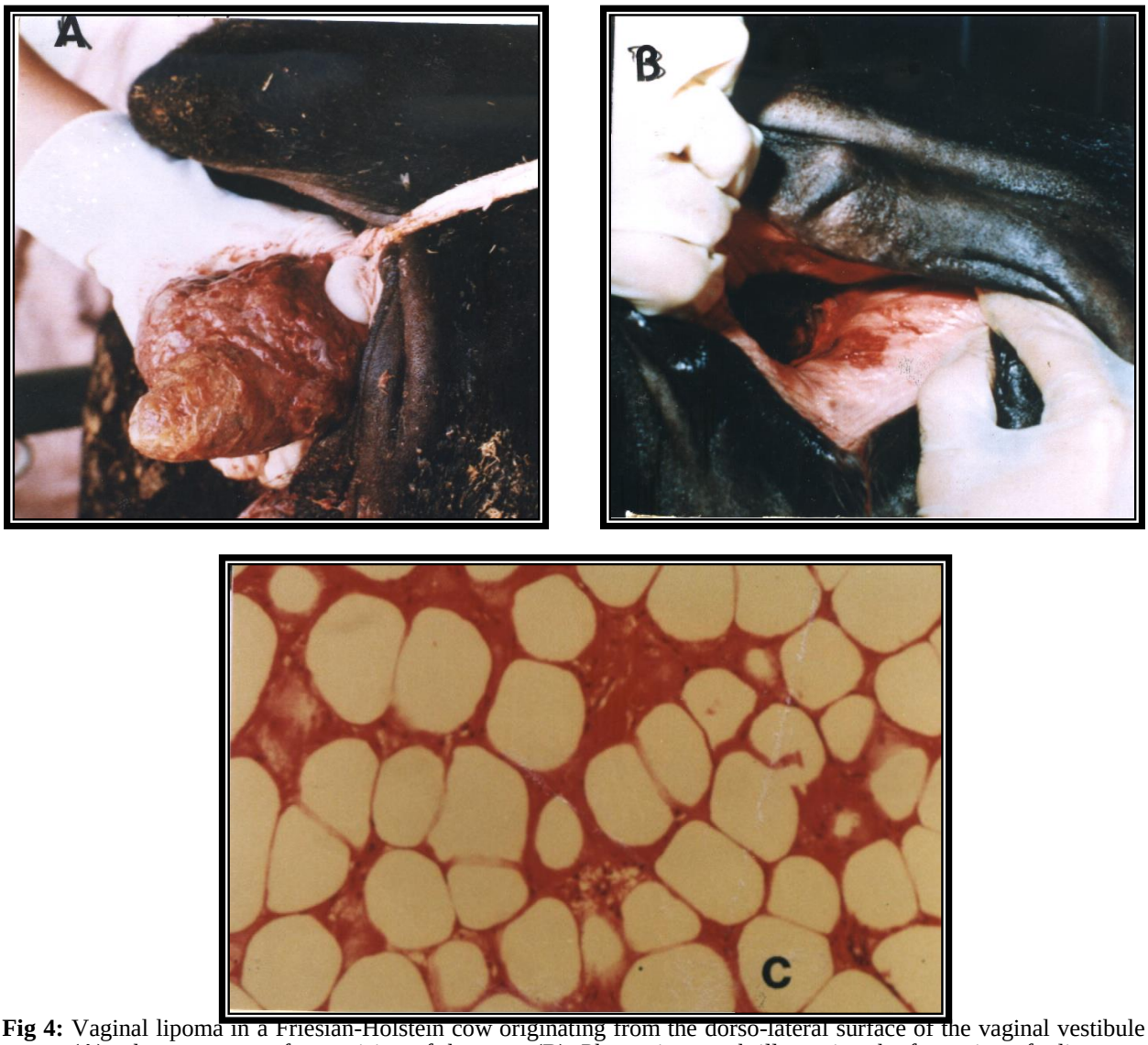


Fig 4: Vaginal lipoma in a Friesian-Holstein cow originating from the dorso-lateral surface of the vaginal vestibule (A), the same case after excision of the mass (B), Photomicrograph illustrating the formation of adipocytes and the fibrous septa dividing the cells into lobules (H&E, x300) (C).

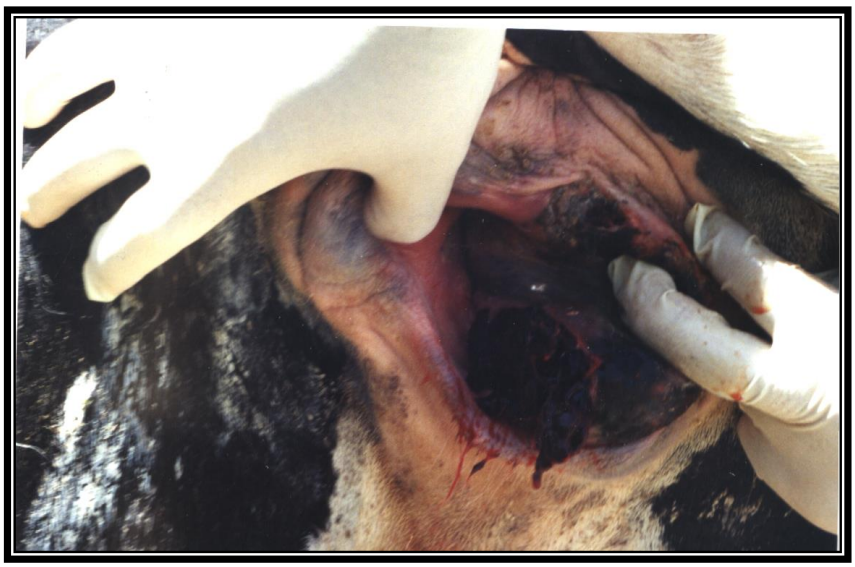
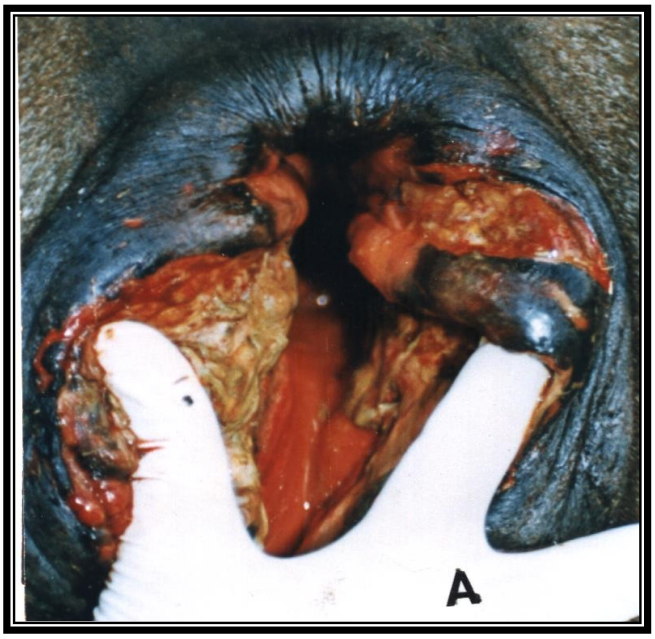
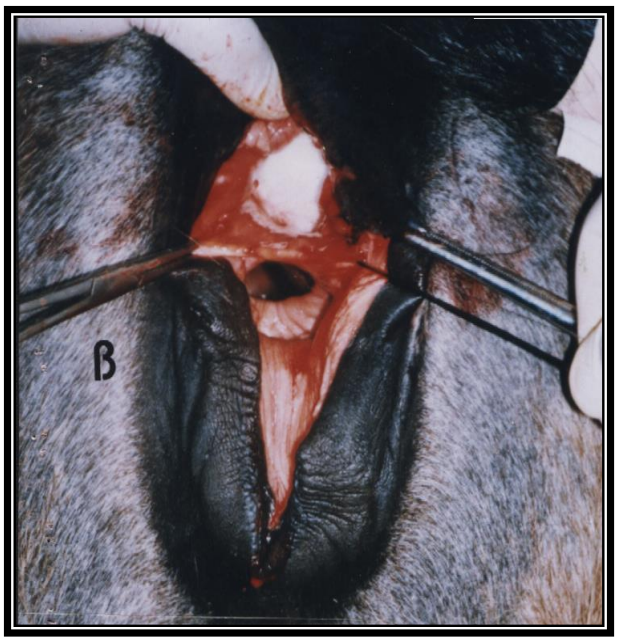


Fig 5: Vaginal laceration in a cow extended to involve the musculature.





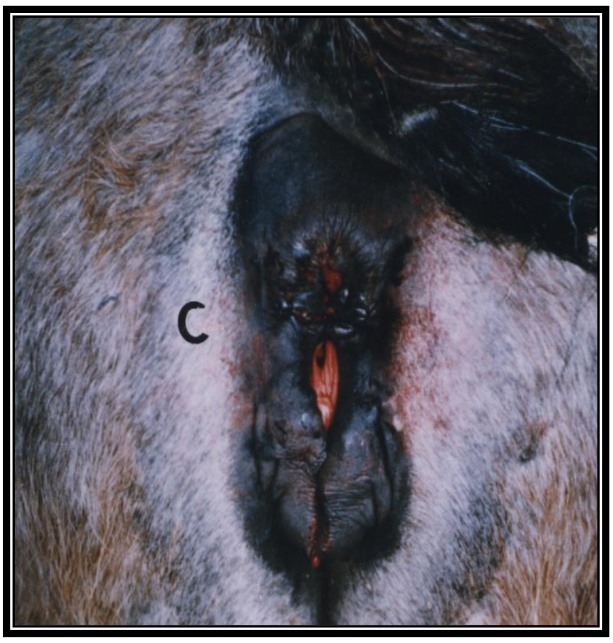


Fig 6: Third degree perineal laceration in a mare before surgery (a), during surgery (b), after completion of the surgery (c).

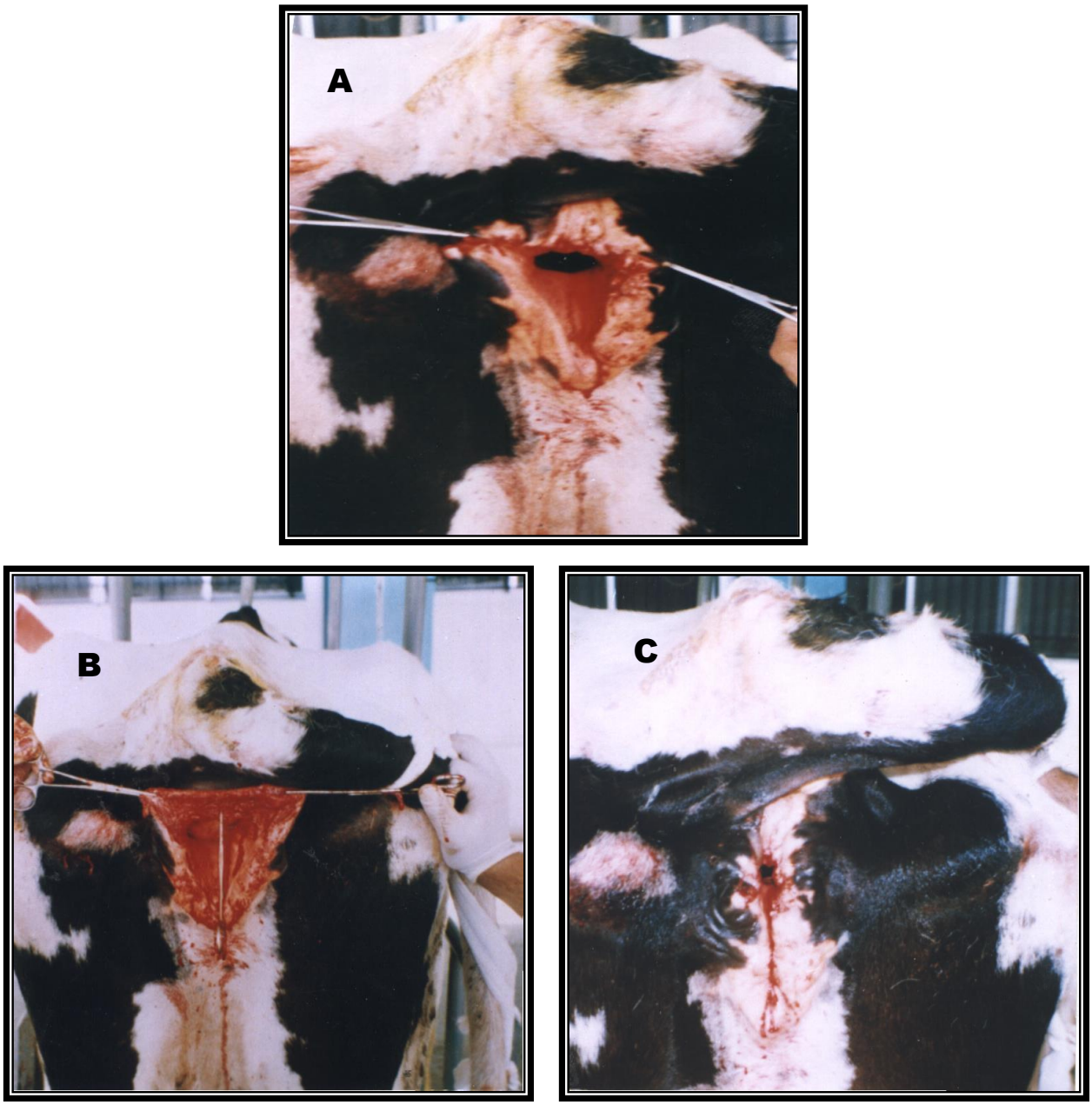
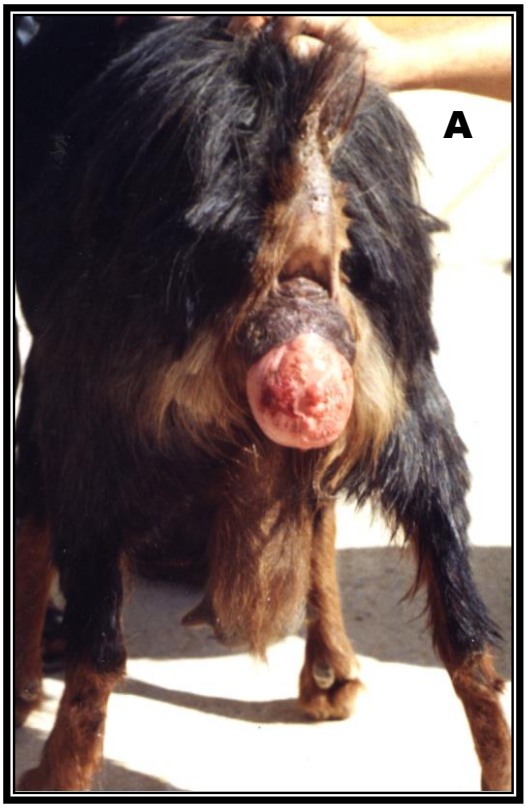


Fig 7: Third degree perineal laceration in a cow before surgery (a), during surgery (b), after completion of the surgery (c).

Fig 8: Bartholin gland cyst originating from the vulva in a Holstein Friesian cow.



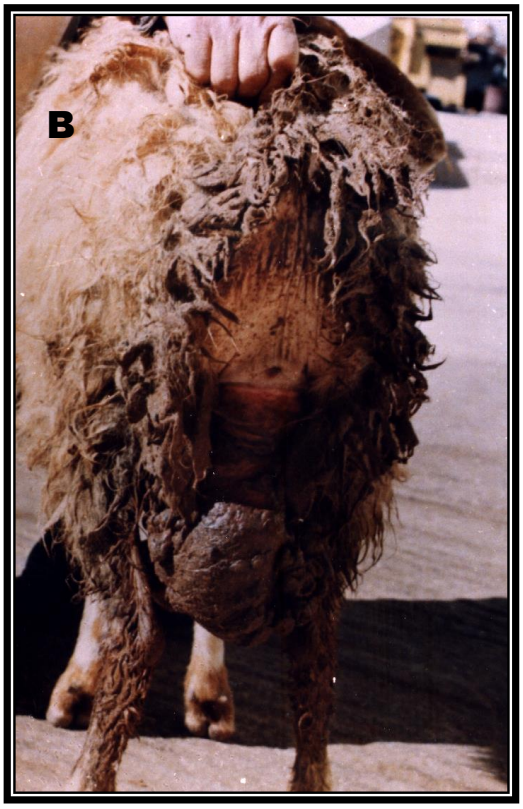


Fig 9: Vaginal prolapse in a goat (A), uterine prolapse in a ewe (B).

DISCUSSION

The perineum is the tissue that forms the body wall at the pelvic outlet and surrounds the rectum, anus and urogenital tracts. This region is bounded dorsally by the base of the tail, laterally by the ischial tubers and semimemberanous muscles and ventrally by the ventral commisure of the vulva. This region is subjected to many surgical affections that might affect the fertility of the animals. The recorded affections, in this study, were mainly perineal, vulvar and/or vaginal neoplasms and perineal lacerations. However, other affections either congenital (as rectovaginal fistula and /or atresia ani) or acquired (Vaginal or uterine prolapse and Bartholin's gland cyst) were also recorded.

The result of this study revealed that neoplasms of the perineum and vagina were diagnosed in most farm animals with highest incidence in cattle. This result is in agreement with other reports ***(3, 22)***. Generally speaking, each species of farm animals seems to have its own characteristic tumor ***(3).*** In this study, the most recorded perineal and vulvar tumor in cows was SCC. The vulva and the eye are usually reported as the two main sites for bovine SCC ***(3, 5, 23)***. In this study, vulvar squamous cell carcinoma occurred in cows aging four to eight years. This might be similar with another report whic stated that the vulvar lesions in cows were not observed before approximately 2.5 years of age ***(24).*** Although, the actual incidence, the heritability and causes of bovine vulvar SCC is unknown ***(6)***, chronic exposure to ultraviolet radiation, in sunlight, was proposed as a primary etiologic agent ***(6).*** Most of the recorded vulvar SCC in cows were sessile, diffuse and ulcerating. These findings are consistent with other reports ***(3,6,23),*** that attributed the ulceration of these masses to the peripheral necrosis of the lesion ***(23).***

Although several therapeutic methods have been used successfully for bovine ocular SCC, treatment of vulvar SCC has not been extensively investigated ***(6).*** Cryosurgery has been reported to be an effective therapeutic modality in the management of bovine vulvar squamous cell carcinoma ***(24).*** The application of cryosurgery for treatment of vulvar SCC in cows confirmed that the smaller the lesions the better the response, failure of larger lesions occurred because of the difficulty of freezing the expanded mass of neoplastic tissue rapidly to the lethal temperature of -25 degrees ***(24).*** Otherwise, the radical surgical excision of the recorded masses, in this work, did not show recurrence or metastasis after a period of observation ranged from two to five moths. This result is in agreement with another report ***(3),*** which stated that surgical excision of SCC at an early stage of the disease can lead to a good prognosis. Although, cryotherapy of bovine vulvar carcinoma may be beneficial treatment, the cost of the equipment may be a limiting factor in its application in the field. Presumably, surgical excision of early stage less extensive lesion has been performed in the field by veterinary practitioners ***(6).***

Bovine vulvar fibrosarcoma was less recorded than SCC. One of the two recorded fibrosarcomas had a history of recurrence. Fibrosarcoma was the only recorded perineal mass in buffaloes that involved the perineum and the base of the tail. However, cutanous fibrosarcomas is extremely rare in bovine animals ***(4)***.

Vaginal tumors are very rare in farm animals and unusual in cows ***(13).*** The most common vaginal tumors in cows are connective tissue tumors: fibromas, fibropapillomas and fibrosarcomas ***(3).*** Perusal of literature and databases did not reveal vaginal lipomas in cows. Vaginal lipoma is a mesenchymal tumor, which occur predominantly in the bitch ***(25).*** In large animals, lipomas are rare, arise from lipocytes and occurs mostly on the trunk and proximal limbs ***(11).*** The recorded vaginal

lipoma, in this study, didn't show metastasis or recurrence. Although vaginal tumors are commonly benign and pedunculated, it may be a cause of dystocia.

Caprine and ovine perineal vulvar and vaginal tumors are rarely recorded ***(9, 26).*** Melanoma was the most recorded perineal tumor in goats in this study. Most of these cases (4/5) were treated successfully without signs of recurrence or metastasis. Most melanomas have a completely benign course while malignant melanoma can metastasize via lymph and blood vessels ***(13).*** The result of this study disagree with another report which stated that caprine melanoma is one of highly malignant neoplasms with high degree of metastasis specially to the regional lymph nodes ***(12).*** Squamous cell carcinoma in the perineum of goats were recorded in only one case that appeared as irregularly shaped, cauliflower-like and ulcerated mass. The exposed surface of this mass had an unpleasant smell and was covered by a keratinous necrotic debris. These symptoms are in agreement with that reported in other study which stated that this kind of tumor is rare in small ruminants ***(10).***

The recorded perineal and vulvar neoplasms in equine were fibromas, fibrosarcomas, squamous cell carcinoma and melanomas. Fibromas and fibrosarcomas are uncommon neoplasm in large animals and arise from the dermal or subcutaneous fibroblasts; while fibromas are benign, fibrosarcomas are locally invasive with metastasis occurring in 25% of the reported cases ***(11).*** The recorded fibrosarcoma in a donkey didn't show metastasis or recurrence after follow up of four months. This results might be in agreement with other reports ***(27, 28)***. Fibrosarcomas are generally of low grade malignancy, manifested by frequent local recurrence and a fairly low incidence of distant metastasis occurring late in the course of the disease ***(11).*** The perineal region, the eye, external male genetalia and ear, is the most common sites of melanomas in horses. Melanoma ranges from inconspicuous macule to an obvious, fast growing spherical mass with alopecic, ulcerated, infected or even normal covering skin ***(29)***. However, the skin covering the metastatic melanoma in the mare of this study was intact. Various kind of tumors as hemangioma, hemangiosarcoma and leiomyoma occasionally reported in the vagina and vulva in mares ***(11, 30)***.

Correction of third degree perineal laceration was delayed for 6-8 weeks after injury to allow for resolution of inflammation associated with acute trauma and for contraction and epithelization of tissue used for shelf reconstruction ***(31).*** However, acute repair of third degree lacerations may be considered only if it can performed within few hours and if the local tissue damage seems compatible with success ***(16)***. During reconstruction of the shelf, a broad tissue apposition with minimal tension on the suture line was always kept in mind. A successful reconstruction of the rectovaginal shelf by using one stage repair was achieved in most cases. However, the partial wound dehiscence in a mare may be attributed to postoperative straining. Although various surgical techniques and suture materials have been described for correction of third degree perineal lacerations in mares and cows ***(1, 18, 19,21, 32-36),*** the use of six bite vertical mattress pattern and Vicryl were successful for correction of most of the reported cases in this study. These results are in agreements with other report in mares ***(35).*** However, this result proved its success in both of mares and cows. Additional suturing of the rectal mucosa was advised by some surgeons ***(20).*** The findings of this study proved that the apposition with the only six-bite suture pattern was adequate to prevent leakage of the fecal material into deeper tissue.

Bartholin's gland cyst is a retention cyst on the lateral wall of the vestibule. The recorded case was unilateral. Bilateral ones were also reported in cows ***(37, 38).*** It responded well with surgical excision. It should be differentiated from Gartner's duct cysts (remains of wolffian ducts) that occurs on the floor of the vagina. However, cystic fibroadenoma origi-

nating from the Bartholin's gland had been reported in goats ***(26).***

In conclusion, the perineum and vagina are subjected to many surgical conditions which could be corrected successfully specially in case of early diagnosis. It is suggested that the veterinarians as well as the farmers should pay regular attention to the perineum of farm animals as a routine husbandry, which allow early diagnosis, correction in the appropriate time, and avoidance of subsequent complications.

ACKNOWLEDMENT

The author would like to thank Dr. M. Fawzy, professor of pathology, Fact. of Vet. Med., Zagazig University for his assistance in the pathology of this article.

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دراسة عن بعض الإصابات الجراحية للعجان والمهبل في حيوانات المزرعة

حسين المغربى

قسم الجراحة – كلية الطب البيطري – جامعة الزقازيق – فرع بنها

أجريت هذه الدراسة على أحدى وخمسون حاله من حيوانات المزرعة تعانى من إصابات جراحيه مختلفه للعجان والمهبل. ومثلت الأورام سواء السرطانية أو الحميدة (٢٠حاله) والجروح والتهتكات العجانيه (١٦ حاله) أكثر الإصابات تسجيلا لتلك المنطقة. كذلك تم تسجيل ودراسة بعض العيوب الخلقية (غياب فتحه الشرج وناسور المستقيم) أو الإصابات المكتسبة (بروز المهبل أو الرحم والأكياس المائية لغده بارثولين).

وكانت أورام الأبقار الأكثر تسجيلا بالمنطقة العجانيه والمهبل هى الأورام السرطانية المحرفشة (٥حالات) وتلتها الأورام الدهنيه الحميدة والليفية السرطانية (حاله لكل منهما). أما فى الجاموس فلم يتم تسجيل إلا ورم واحد بالعجان (ورم سرطانى ليفى). وبينما كانت أورام الماعز الأكثر تسجلا بتلك المنطقة هى الأورام الميلانينيه(٥ حالات) تلتها الأورام السرطانية المحرفشة(حاله واحده) لم يتم تسجيل إلا ورم واحد فى الأغنام (ورم سرطانى حرشفى). أما فى الفصيلة الخيليه فلقد سجلت الأورام الليفية الحميدة (حالتين) والأورام السرطانية المحرفشة والليفية السرطانية والميلانينيه(حاله لكل منهم). وقد تم تحديد أماكن تواجد تلك الأورام وتوصيفها وطرق استئصالها جراحيا وكذلك النتائج بعد إجراء الجراحة لها.

وقد تم وصف ودراسة حالات التهتك من الدرجة الثالثة بالمنطقة العجانيه سواء فى الأفراس (٤ حالات) أو الأبقار(حالتين). كما تم التدخل جراحيا فى جميع تلك الحالات من خلال أعاده تكوين الحاجز بين المستقيم و المهبل بطريقه المرحلة الواحدة ، وقد حدث الالتئام بنجاح فى جميع تلك الحالات ماعدا فرس واحده تعرضت للتهتك مما أدى للتدخل الجراحى مرة أخرى.

هذا وقد سجلت مختلف نتائج هذه الدراسة وتم مناقشتها تفصيليا.