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STUDIES ON SOME SURGICAL AFFECTIONS OF MALE EXTERNAL GENITALIA IN EQUINE

(With 9 Fig.)

By

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دراسات عن بعض الاصابات الجراحية للاعضاء الذكورية الخارجية في الخيل

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تمت الدراسة على عدد من حيوانات الفصيله الخيليه بمستشفى كلية الطب البيطرى - جامعة الاسكندريه - ادفينا على عدد من ذكور الخيل .
تم الفحص الاكلينيكي والتدخل الجراحى تحت تأثير التخدير بالكلورال هيدرات .
وقد وجد من النتائج ان الاصابات الجراحية الشائعة فى الاعضاء الذكورية الخارجية للخيل هى الجروح المختلفه لكيس الصفن ، الاورام السرطانية ، القيلة المائية ، فتق أربى ، الخنثى ، والفتق الصفنى .

SUMMARY

In the present study the affected animals of equine species were collected from the clinical cases presented to the clinic of the Fac. of Vet. Med., Edfina. All cases were subjected to clinical examination and surgical intervention under chloral hydrate narcosis. Results indicated that the most common surgical affections of male external genitalia in equine were, scrotal wounds, neoplasms, hermaphrodite, hydrocele, scrotal hernia, and inguinal hernia.

Keywords: Surgical affections, male external genitalia, equines.

INTRODUCTION

The most common external defect of male genital system was partial to complete cleft of the scrotum. Pseudohermaphrodite had internal organs resembling the both sexes (DENNIS, 1979).

Hernias may be congenital or acquired and may occur as isolated defects or may be associated with defects of other parts of the body (DENNIS and LEIPOLD, 1968).

WRIGHT (1963) reported that congenital scrotal hernia presents little surgical difficulty. Adopting the covered method of castration, the vaginal sac is bluntly separated from the surrounding connective tissue down to the external inguinal ring. The sac is then given twisted and occluded as close to the ring as possible.

Frank (1964) mentioned that paraphimosis occurs when the animal is unable to retract the penis into sheath. Amputation of a portion of the penis is necessary for treatment of paraphimosis. The neoplasm of penis may cause a phimosis or paraphimosis and enlargement may be seen in the sheath.

Many surgical affections of the scrotum and testicle were met with in animals. Most of these affections were scrotal wound, scrotal hernia, orchitis, hydrocele, and neoplasms (SHABAAN, ANISA, KADRI, and ABD-ELMABOD 1985).

KASSEM, HUSSEIN, and KENAWY (1989) reported that a simplified technique was performed for cutaneous resection and shortening of the penis. This method proved to be safe and satisfactory for traction of the prolapsed penis in the horse.

MATERIALS AND METHODS

The present study was carried out on a Number of 9 cases of equine suffering from some surgical affections of the male external genitalia. These cases were admitted to the clinic of Fac. of Vet. Med., Alex. univ., Edfina. The affected animals were subjected to clinical examination and surgical treatment. Surgical procedures were carried out under the effect of local infiltration analgesia using 2% procaine HCl and animals were premedicated using tranquilizers in a dose rate of 0.5 mg./kg. body weight, followed by chloral hydrate narcosis 10% solution in a dose of 5 gm./ 50 kg. body weight intravenously. Each site of operation was prepared for aseptic surgery.

The aim of the present work is to state the prevalent surgical affections of male external genitalia and describe a simplified surgical procedure for the treatment of these affections.

RESULTS

In a male donkey a deep wound was present at the preputial sheath due to accident by motor car. The wound was deep including the skin, fascia and underlying muscles. The wound respond to the treatment by excision of the wound lips, suturing the muscles and closing the skin by simple interrupted pattern (Fig. 1).

Simple wound after biting of other animal in a donkey was recorded, the scrotal wound was washed, cleaned and locally disinfected. One million units of crystalline penicillin solution was locally infiltrated. Daily local dressing and systemic dose of penicillin streptomycin in a dose of 15,000 units and 10 mg/kg body weight respectively for 5 days were administered.

In our finding, fibroma was observed in a male horse at the glans penis. Surgical excision of the tumour was performed (Fig. 2 & 3).

A large size congenital swelling was present at the ventral aspect of the preputial sheath in a donkey. The swelling was covered by ulcerative granulation tissue at its surface. Good results were obtained after surgical removal of the swelling (Fig. 4 & 5).

Examination of the external genitalia of a donkey revealed presence of two organs resembling both sexes. There were penislike structure with small sheath, and vagina. There was two well developed teats at the normal anatomical position. The case was diagnosed as a case of hermaphrodite (Fig. 6).

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Paraphimosis in a male donkey was observed associated with injury of the glans penis. A simplified surgical technique was performed to correct the prolapsed penis in a donkey by cutaneous resection of the internal prepuce (Fig. 7).

Hydrocele was characterized by bilateral cystic dilatation of the tunic. The affection recurred after two trials of aseptic aspiration of the content and injection of one million units of crystalline penicillin. Surgical reduction was only the treatment of the case of scrotal hernia after classical method of open covered castration (Fig. 8).

Alarge size inguinal hernia was observed in a donkey. Good results were obtained by reduction of the hernial contents after castration (Fig. 9).

DISCUSSION

The aim of the present study is to detect the prevalent surgical affections of the male external genitalia in equine. Most of these affections were scrotal hernias, hydrocele, neoplasms, hermaphrodite, and scrotal wounds. These findings were in agreement with that mentioned by DENNIS (1979) and SHABAAN, *et al.* (1985).

Surgical technique described for treatment of scrotal wound by local application of crystalline penicillin and daily dressing of the wound. Also the radical excision of the neoplasms were mentioned by SHABAAN, *et al.* (1985).

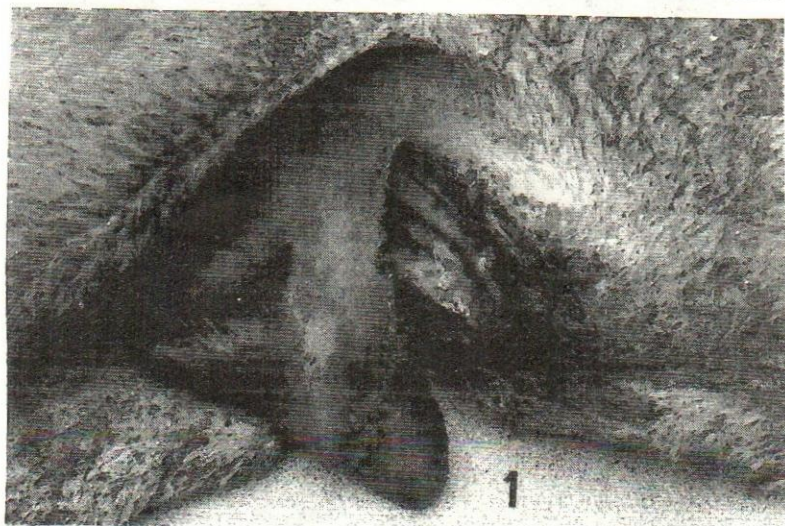
Scrotal hernia is one of the common surgical affection in equine. Recovery of the hernia was achieved by classical method on open covered castration. These findings were in agreement with that mentioned by Wright (1963).

Hermaphrodite is characterized by presence of two organs resembling both sexes (DENNIS, 1979). In our findings, clinical examination of the affected donkey revealed that there were a penis-like structure with small sheath and vagina. There were also a two well developed teats at the normal anatomical position.

A simplified technique was performed for cutaneous resection and shortening of the penis in the case of paraphimosis in donkey. This method described by KASSEM, HUSSEIN, and KENAWY (1989), they mentioned that this method proved to be safe and satisfactory for traction of the prolapsed penis.

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