TREATMENT OF SMALL SKIN ABSCESSES IN TOM-CATS

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A technique for the treatment of cutaneous abscesses in tom-cats was described. It aimed at healing by first intention and worked extremely well in unruptured small abscesses but can also be applied with advantage to recently made abscess wounds.

Factors which seemed to contribute in its success included unruptured state of the abscess, proper preparation of the site, thorough mechanical curetting, availability of sufficient healthy skin, absence of secondry invaders, absence of licking by the patient, and last but not the least, a very Judicious use of antibiotics, enzyme, and steroid preparations.

INTRODUCTION

Small skin abscesses are commonly seen in tom-cats, specially during the breeding season, when they roam about rather freely in search of their mate and may occasionally indulge in open fights. These may occur any where on the body and following the path of least resistance may travel long distances, under their loose skin. Conventional treatment of these abscesses consist in several applications of demulcents, followed by surgical opening when ripe and repeated dressing with usual antiseptics. Healing by granulation, took a long time and ended up in a large sized scar. All this is agonizing to the patient, costly time consuming and inconvenient to the owner and demanded a lot of time and labour from the attending veterinarian.

A surgical technique for the treatment of skin abscesses has been described. It aimed at closing the abscess as a fresh wound thus affecting healing by first intention. It promoted healing and reduced hospitalization time. The cost to the pet owner was decreased, and resulted in a minimum scar tissue.

THE TECHNIQUE:

Sufficient dose of any wide-range systemic antibiotic was injected before the surgery, so that its effective blood levels were available at the time of operation. If the patient showed a temperature of more than 104°F and or signs of generalized toxaemia, a steroid preparation 0.25 ml (0.125)

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of *Flucort* veterinary solution[1] was also given intramuscularly. Its need was felt mostly in large sized open abscesses.

The site was first of all prepared for aseptic surgery. If not already open the abscess in question was opened with a liberal incision, allowing adequate drainage and permitting easy approach to every corner of the wound. The wound was then alternately flushed and drained, with sterile physiologic saline untill all traces of the pus were completely removed.

Aerosol *Trypzyme*[2] was then sprayed on the inside of the wound and allowed to remain in for several minutes. Afterwards, the wound was carefully scrapped with a bone curette, breaking all adehesion and removing all necrotic tissue. Flushing with *Trypzyme* and curetting were continued untill all detritus was completely removed. If required, the edges of the wound were then trimmed. Deribiotic Liquid[3] was then thoroughly flushed both in and around the wound. The wound was closed by stitching the skin with vertical interrupted mattress sutures.

Usually no follow-up was needed. But if the animal continued to behave as sick and or the site of the operation showed signs of acute inflammation, one or more additional injections of the systemic antibiotics were given.

RESULTS AND DISCUSSION

A total of 39 tom-cats, having 1 to 3 small skin abscesses were thus treated, Those with unruptured abscesses recovered without any after treatment and 31 of them were discharged after 48 hours of observation at the clinic. However, in 7 of these 31 cases a variable amount of serous fluid got accumulated under the skin, which resorbed gradually. In 5 of the remaining 8 tom-cats whose abscess had ruptured 4 to 46 hours prior to their arrival to the clinic, healing although by first intention, took 5 to 10 days and a full course of systemic antibiotics had to be given. The remaining 3 cases failed to heal as desired. Factors which seemed to cause these failures included unusually large size of the abscess, larger time lapse between their rupture and the application of the technique, too much shrinkage of the surrounding skin, presence of secondry infection, laceration of the wound through excessive licking, and insufficient curetting. Conservative therapy in these three cases resulted in healing by granulation which took 20 to 30 days.

1. Syntax lab. Inc., Palo Alto, California, U.S.A.
2. Burns Pharmaceuticals, Oakland, California, U.S.A.
3. S.E. Massengill Co. Bristol, Tennessee, USA.

Even some recent books, Catcott (1964), Dalling (1966) and Wilkinson (1968) recommended the ripening of feline skin abscesses by the application of poultices and rubefacients, their surgical ripening at the most dependent part, cleaning with sterile normal saline, removal of the dead tissue, followed by application of antiseptic dressings until healing by granulation was achieved. Systemic antibiotics have also been advised, particularly when the lesions were large and/or were of long standing. All this, however, meant a slow and protracted process of healing.

Availability, in recent times, of some more potent, less irritating and not too costly antiseptics, some useful enzyme preparations and hormonal substances present a possible ray of hope. In fact, it was combination of these drugs which was tried in conjunction with the available surgical know-how. The success of the technique, therefore, seemed to depend largely upon a judicious, though liberal, use of systemic as well as topical antibitics; which quickened the process of healing. Minimization of damage to the surrounding healthy tissue also helped in quick recovery. This was aided by :–

a) The intact skin of the unruptured abscesses on the one hand. made available sufficient healthy skin to comfortably cover the wound and on the other protected it from secondary invaders which complicate the healing process.

b) Application of aerosol *Trypzyme* excluded the possibility of mechanical injury which accompanies ruthless manual curetting.

c) Chemical sterlization of the wound in conjuction with a subdued inflammatory reaction because *Flumethasone* adminstration minimized local irritation which otherwise incited licking and which in turn caused laceration of the wound and/or interference in the process of healing,

The removal of necrotic tissue, pus and other organic wastes was facilitated by the enzyme trypsin of the aerosol *Trypzyme* whereas peruvian Balsam N.F., Castor oil, and Isopopyle Alchohol contained therin seemed to moderate action. This preparation was, therefore, employed as chemical curetting agent which aided in the thorough cleanisng of the abscess wound.

Freshly curetted and *Trypzyme* soaked abscess wounds were painted with *Deribiotic Liquid* because its Neomycin-Polymixin B combination is claimed to be not inactivated by enzymes and because it has a fairly wide range of inhibitory effect against a large variety of topical pathogens. Each

ml. of this liquid contained 100 mg of Neomycin sulphate and 25,000 units of Polymixin B sulphate.

Each ml of *Flucort* solution contained 0.5 mg of Flumethasone; a chemical modification of prednisolon, which is claimed to excel its parent compound in its anti-Inflammatory and gluconeogenic properties (Boland, 1960). Whenever used this drug appreciably eased the irritation pruritis.

The technique appears no less than a boon for the Veterinarian working in the hot and humid climate of the tropics. It would, therefore be worthwhile if a combination of similar drugs is also tried for the treatment of comparable skin abscesses in other domestic animals.

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