

sires to fill in a gaping wound, for running warm water when applied to injured tissue is a great stimulus for granulation tissue formation.

When a case of proud flesh is encountered, the use of a chemical necrotizing agent may be desirable. A paste of sulfur — sulfuric acid can be used advantageously with some cases. Surgical removal with a scalpel followed by actual cautery to provide hemostasis, or the use of actual cautery alone, are used in controlling granulation tissue. Since efforts in control have not proved to be ideal, the following experimental attempt was made to prevent its occurrence.

A two year old filly that had been admitted to Stange Memorial Clinic for the treatment of wire cuts was selected as the experimental animal. Two severe wire cuts were present; one on the dorsal surface of the fetlock of the pectoral limb and another in the same anatomical area of the pelvic limb. Neither injury entered the fetlock joint and both gaping wounds appeared to be approximately the same in severity.

The wounds were cleaned, packed with sulfanilamide powder and then bandaged. Tetanus antitoxin (1500 units) was given subcutaneously. Eight cc. of penicillin streptomycin combination was injected intramuscularly each day for a period of eight days. Bandages were changed daily for six days and thereafter, every other day. Ten days after the initial therapy, the local infection was controlled, and the danger of systemic infection was greatly decreased.

At that time, an experimental corticosteroid, Triamcinolone Acetamide, (Vetalog-Squibb) was applied only to the wound on the hind leg, leaving the other wound as a control. Sulfarea was used with vetalog for its antibacterial, wound cleansing, and tissue adhering qualities. An average mixture of 2½ cc. of vetalog and 2½ cc. of sulfarea was applied topically to the rear wound while only 2½ cc. sulfarea was applied to the wound on the anterior limb. Both wounds were then bandaged. This procedure was repeated every other day for a period of three weeks.

During the period of topical application

of this anti-inflammatory corticosteroid compound, the following wound characteristics were noted:

1. The wound on the rear leg had a yellow cast for the first four days, after starting with vetalog, while the control wound had a red appearance. After that time, however, a reverse in the color picture occurred.
2. The control wound held easier during the bandaging procedure.
3. The control wound was less sensitive to light touch.
4. The control wound showed excessive granulation tissue formation. This was easily seen at the junction of the wound and the adjacent intact skin where a buildup of proud flesh occurred. On the rear leg wound granulation was held in check, but the healing process was also retarded as was evidenced by the inhibition of skin growth at the margin of the wound.
5. The small amount of granulation tissue that did form in the vetalog applied wound was of a more meaty consistency than was that of the control wound.
6. The healing time was much shorter for the control wound.

The information learned in the above clinical case was used to advantage on wounds in the hock area of two other clinical equine patients. Vetalog was applied in smaller quantities and at longer intervals (1-2 cc. every 3-5 days) on the latter two cases. A light bandage was applied for 24-48 hours after each application of the drug. By following such a procedure, the formation of excessive granulation tissue was suppressed and satisfactory wound healing did occur.

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7

Incarceration of the Small Intestine of a Steer "Gut Tie," On May 10, 1959, a yearling Hereford steer was admitted to the Stange Memorial Clinic with a history of abdominal pain, frequent straining, switching of the tail and general depression. A physical examination revealed that the mucous membranes were dark red, the abdomen distended and fluid

could be felt by ballottement of abdomen. A rectal examination was then performed. The bladder was not distended, but gas-filled loops of the small intestine extending back into the pelvic cavity and a taut band extending forward on either side of the rectum was palpable.

The skin was prepared for a laparotomy, and the operative site anesthetized by injecting four percent procaine into the muscles, skin and subcutaneous tissues. A six inch incision was made in the right paralumbar fossa through the skin, fascia, muscles and peritoneum. The small intestines were found to be distended with gas, but the cecum was normal, so far as could be determined by palpation. The taut bands palpated per rectum were identified as being the inguinal fold of the peritoneum containing the remnants of the spermatic cord. The strangulated small intestines were found to extend through a rent in the inguinal fold on both sides. It was impossible to return the small intestine through the rent, so the inguinal fold on both sides was torn free at the internal rings. The small intestine then fell downward into approximately normal position. No. 4 chromic catgut was used to suture the peritoneum, muscles and fascia, and the skin was sutured with nylon suture material. A continuous outfolding suture pattern was used on the peritoneum, simple continuous on the muscles and fascia, and an interrupted outfolding pattern on the skin.

On May 11, 1959, the patient's temperature was 101.8° F. Bowel movements were occurring normally, but the consistency was dark, tarry and very odoriferous. The appetite was fair and the mucous membranes were still injected. The patient showed abdominal pain and a reluctance to move. Five hundred cc. of 50% dextrose was given I.V. as a stimulant and a detoxifying agent. Laboratory examination of the blood showed a slight anemia and a moderate leukocytosis.

On May 12, 1959, the patient's temperature was 104.7° F. The animal had a fair appetite, but the bowel movements were still dark, tarry and odoriferous. The animal showed considerable constipation. One thousand cc. of citrated blood was

transfused I.V. The sutures were still in place and no edema of the operative site was evident.

On May 13, 1959, the steer's temperature was 102.4° F. The bowel movements were unchanged and the appetite very poor. One half ounce of nux vomica was given orally in a gelatin capsule as a general stimulant and 1000 cc. of citrated blood was transfused I.V.

On May 14, 1959, the steer's temperature was 102° F. The animal showed constipation, but the feces were lighter in color and less odoriferous. The appetite was improved and the general condition of the animal was much better. The sutures were in place and no treatment was initiated.

On May 15, 1959, the patient's temperature was 102.4° F. The appetite was very good and the bowel movements were of almost normal consistency, color and odor. The general condition of the animal was very good and the patient was discharged from the clinic with instructions to remove the sutures in several days.

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8

Esophageal Foreign Body. On April 1, 1959, a one year old female Shetland pony was admitted to the Stange Memorial Clinic.

Previous history revealed that this pony was purchased one week ago and since then treated for a cold. The owner observed that the pony would eat and drink, but soon afterwards saliva and mucus were coughed up into the mouth.

On April 2, 1959, a clinician examined the patient. Palpation of the esophagus revealed a distention of this structure about two inches anterior to the thoracic inlet. There was no history of having received a medication bolus or tablet. The temperature was normal. No other symptoms were present at this time.

On April 3, 1959, stall observation revealed that the pony was coughing rather consistently. The cough was productive in that hay and considerable saliva was produced. After drinking water, the fluid appeared to pass into the pharynx, into the nasal pharynx and out the nostrils. The distended area was prepared for surgery