

Summary of

Treatments

Used by

Iowa Veterinarians

Various treatments used in common large animal disorders have always been a topic of great discussion among Iowa practitioners. Because of this interest and educational value, the staff of the Iowa State College Veterinarian initiated the idea of conducting a survey on this subject at the annual Iowa Veterinary Medical Association meeting in January.

The survey was conducted through the use of a questionnaire which was written by Leonard Seda, a senior veterinary student on our staff. In compiling this questionnaire many difficulties were encountered in wording multiple choice questions for rapid answering. The greatest problem arose in getting a concise question coupled with all the possible answers and still have the practitioner check only his most used treatments.

The questionnaire was answered by 152 practitioners. Some answered with two of three treatments which they either use simultaneously or alternate equally depending on the situation; however, it is important to note that the percentages are figured using 152 as the base. Because of these simultaneous or equally alternative treatments, the percentages will not add up to 100. This does not eliminate the practicality of the percentage system because one still gets a fairly good picture of the favored treatments.

We on the Iowa State College Veteri-

narian Staff have found the results of this survey very interesting and educational. Some of the general conclusions that can be drawn from this survey include:

- (1) Many relatively "old" treatments still prevail.
- (2) A few comparatively "new" treatments have taken over very rapidly in the average practitioner's opinion. (e.g. question on swine ascariasis)
- (3) Many conditions still have varied treatments with an equal number of supporters and no distinct majority.

We wish to extend our sincere thanks to the Iowa Veterinary Medical Association members for their splendid cooperation in filling out this questionnaire. Also our deep appreciation goes to the Iowa State College Veterinary Faculty for their whole-hearted support and generous advice.

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1. Treatment of Shipping Fever

- | | |
|-------------------------------------|-----|
| a. Triple sulfas intravenously | 32% |
| b. Sulfamethazine intravenously | 19% |
| c. Sulfamethazine intraperitoneally | 36% |

d. Streptomycin	47%	c. Kaolin and Pectin	27%
e. Tetracycline	31%	d. Combination of the above three	45%
The percentages for the routes of administration were computed by using the number of veterinarians using the drug and not the total number of veterinarians answering the questionnaire.			
Intramuscular	30%	e. Sulfaquanidine	21%
Intraperitoneal	36%	f. Sulfathiazole	24%
Intravenous	36%	g. Streptomycin	14%
Oral	6%	h. Terramycin capsules or soluble powder	34%
f. Terramycin ®	20%	i. Tetracycline capsules or soluble powder	27%
Intramuscular	16%	j. Other	36%
Intraperitoneal	29%	6. Milk Fever (Routine)	
Intravenous	36%	a. Calcium gluconate 500 cc. intravenously	100%
Oral	3%	b. Calcium gluconate 1,000 cc. intravenously	4%
g. Other	45%	c. Calcium gluconate 500 cc. intraperitoneally	13%
Those mentioned were combinations of the above, other sulfas, penicillin, penicillin combined with streptomycin and antiserums.			
2. Treatment of Acute Bloat		d. Vitamin D	16%
a. Polymerized methyl silicones	64%	e. Antihistamine	6%
b. Antiferments (turpentine, etc.)	66%	f. Other	18%
c. Mineral oil	28%	7. Treatment of Wooden Tongue	
d. Cathartics (magnesium sulfate, etc.)	36%	a. Sodium iodide intravenously	100%
e. Ruminatoric drugs (arecoline, etc.)	21%	b. Antibiotic	36%
f. Antihistamines	13%	Penicillin	18%
g. Other	16%	Terramycin	4%
3. Calf Diphtheria		Streptomycin	11%
a. Sulfapyridine intravenously	46%	Other	3%
b. Broad spectrum antibiotics	55%		36%
c. Other sulfas	36%	c. Organic iodide on feed	39%
d. Other	7%	d. Other	2%
4. Treatment of Foot Rot		8. Treatment of Acetonemia (Ketosis)	
a. Sulfapyridine intravenously	44%	a. Dextrose (50%) 500 cc.	100%
b. Penicillin	59%	b. Continuous drip dextrose	4%
c. Terramycin	10%	c. Chloral hydrate orally	39%
d. Organic iodides	19%	d. Vitamin A	11%
e. Clean and wrap foot	41%	e. Sodium propionate	5%
f. Other sulfas	28%	f. Cortisone acetate	26%
g. Other	14%	g. ACTH	29%
5. Treatment of Calf Scours		h. Other	16%
a. Astringents	24%	9. Treatment of Traumatic Gastritis (Acute)	
b. Bismuth salts	13%	a. Immediate market	59%
		b. Systemic therapy	
		Laxative diet	13%
		Antibiotics or sulfas intraperitoneally	36%
		Inclined plane	19%
		Rumen stimulants	15%
		c. Rumenotomy	51%
		d. No treatment	5%
		e. Other	9%

10. **Estimation of the Percentage of recovery, in Cases of Traumatic Gastritis, without Surgery**
 - a. 0 to 25 percent recovery 23%
 - b. 25 to 50 percent recovery 32%
 - c. 51 to 75 percent recovery 24%
 - d. 76 to 100 percent recovery 18%
11. **Treatment of Coccidiosis in the Bovine (Acute)**
 - a. Feed adjustment only 3%
 - b. Astringents 40%
 - c. Sulfas 63%
 - d. Teniatol® 41%
 - e. Other 18%
12. **Treatment of Bovine Pyelonephritis**
 - a. Penicillin 59%
The percent used for dosage was figured by using the number of veterinarians administering penicillin
 - 1) One million units 1%
 - 2) two million units 10%
 - 3) three million units 61%
 - 4) over three million units 13%
 - b. Streptomycin 31%
 - c. Terramycin 11%
 - d. Methanamine 18%
 - e. No treatment 3%
 - f. Other 11%
13. **Treatment of Mange (Swine)**
 - a. Crude petroleum (mange oil) 6%
 - b. Lime-sulphur dip 2%
 - c. Benzene hexachloride 30%
 - d. Chlordane 88%
 - e. Lindane 26%
 - f. Other 2%
14. **Ascarids in Swine**
 - a. Sodium fluoride in feed 52%
 - b. Cadmium oxide in feed 56%
 - c. Piperazine compounds in water 90%
 - d. Capsule nematocide (santonin, etc.) 13%
 - e. Other 9%
15. **Swine Erysipelas (Acute)**
 - a. Penicillin (For individual severe cases) 95%
 - b. Antiserum (For individual severe cases) 92%
- c. Live culture and antiserum (For rest of drove) 57%
- d. Antiserum alone (for the rest of the drove) 26%
- e. Bacterin (for the rest of the drove) 17%
- f. Other 14%
16. **Baby Pig Scours**
 - a. Methanamine (to sow) 68%
 - b. Formalin (to sow) 15%
 - c. Triple sulfas intraperitoneally 28%
 - d. Hog Cholera antiserum intraperitoneally 15%
 - e. Enteric sulfa tablets orally 14%
 - f. Antibiotics 38%
 - g. Other 27%
17. **Swine Pneumonia (Acute)**
 - a. Penicillin 71%
 - b. Streptomycin 50%
 - c. Triple sulfas intraperitoneally 38%
 - d. Sulfathiazole in drinking water 73%
 - e. Soluble antibiotics 21%
 - f. Expectorants 39%
18. **Necrotic Enteritis (Necro)**
 - a. Sodium sulfathiazole in water 92%
 - b. Alkaline solution in soaked oats 19%
 - c. Soluble antibiotics 14%
 - d. Other sulfas in water 14%
 - e. Put on antibiotic feed after the outbreak 21%
 - f. Put on soaked oats and reduce protein during treatment 19%
 - g. Other 14%
19. **Hemorrhagic Enteritis (Swine)**
 - a. Sodium arsanilate in water 10%
 - b. Sodium sulfathiazole in water 39%
 - c. Soluble antibiotics 5%
 - d. Put on soaked oats 12%
 - e. Other sulfas 1%
 - f. Other 11%
20. **Leptospirosis**
 - a. Do you vaccinate any cattle for leptospirosis?

Yes	40%
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- b. Do you vaccinate any swine for leptospirosis?
Yes 24%

21. Percentage of Sow Dystocias in which Caesarean is Performed

- a. 0 to 10 percent of dystocias 78%
b. 11 to 25 percent of dystocias 13%
c. 26 to 50 percent of dystocias 5%
d. 51 to 75 percent of dystocias 2%
e. 76 to 100 percent of dystocias 0%

In the following three questions (twenty-two, twenty-three and twenty-four) the veterinarian was requested to indicate the percentage of hogs receiving each treatment.

22. Hog Cholera Vaccination

- a. Live virus and antiserum
1 to 20 percent 36%
21 to 40 percent 10%
41 to 60 percent 18%
61 to 80 percent 5%
81 to 100 percent 7%
b. Modified live virus and antiserum
1 to 20 percent 5%
21 to 40 percent 7%
41 to 60 percent 15%
61 to 80 percent 9%
81 to 100 percent 62%
c. Modified live virus alone
1 to 20 percent 7%
21 to 40 percent 1%
41 to 80 percent 0%
81 to 100 percent 2%
d. Crystal violet
1 to 20 percent 3%
21 to 40 percent 2%
41 to 100 percent 0%
e. B.T.V.[®]
1 to 20 percent 6%
21 to 40 percent 1%
41 to 60 percent 1%
61 to 100 percent 0%

23. Erysipelas Vaccination

- a. Live culture and antiserum
1 to 20 percent 17%
21 to 40 percent 9%
41 to 60 percent 15%

- 61 to 80 percent 8%
81 to 100 percent 37%
b. Avirulant culture and antiserum
1 to 20 percent 17%
21 to 40 percent 5%
41 to 60 percent 3%
61 to 80 percent 5%
81 to 100 percent 1%
c. Antiserum alone
1 to 20 percent 17%
21 to 40 percent 3%
41 to 60 percent 4%
61 to 80 percent 1%
81 to 100 percent 1%
d. Bacterin
1 to 20 percent 16%
21 to 40 percent 11%
41 to 60 percent 14%
61 to 80 percent 9%
81 to 100 percent 14%

24. Simultaneous Hog Cholera and Erysipelas Vaccination

- a. Live virus, hog cholera serum and erysipelas antiserum
1 to 20 percent 13%
21 to 40 percent 1%
41 to 60 percent 1%
61 to 80 percent 0%
81 to 100 percent 1%
b. Modified live virus, hog cholera serum and erysipelas antiserum
1 to 20 percent 17%
21 to 40 percent 4%
41 to 60 percent 2%
61 to 80 percent 0%
81 to 100 percent 5%
c. Modified live virus, hog cholera serum and erysipelas bacterin
1 to 20 percent 16%
21 to 40 percent 6%
41 to 60 percent 5%
61 to 80 percent 3%
81 to 100 percent 18%
d. Modified live virus, hog cholera serum, erysipelas culture and erysipelas antiserum
1 to 20 percent 3%
21 to 40 percent 3%
41 to 60 percent 1%
61 to 80 percent 0%
81 to 100 percent 3%

* Questionnaire

(Continued on page 208)

* **Actinomycosis**

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Case History

On January 6, 1955 a 4-year-old Guernsey bull was presented to the clinic and was assigned Case No. 48697. A clinical examination revealed a bull of average conformation and flesh with a swelling on the right mandible protruding approximately 4 cm. and about 8 cm. long. There were no fistulous tracts visible but one area about 1 cm. square on the ventral border was soft to the touch. The rest of the lesion was firm and non-movable. Temperature, respiration, pulse and rumen movements were within normal limits. Radiograph No. 3311 revealed a rarefying osteitis and osteomyelitis of the right mandible in the vicinity of the second premolar tooth extending posteriorly under the third premolar tooth and the first molar tooth. On the basis of the clinical and radiographic findings a diagnosis of mandibular actinomycosis dextra and alveolar periostitis was made. Since it was believed on the basis of the radiographic findings, that the mandibular canal had not yet been invaded x-ray therapy was advised. On January 8 1955 the bull was restrained in the stocks by a student. As described above, 500 roentgens was administered to the affected area. This treatment was repeated every 48 hours, using a different student to restrain the bull each time, until a total of five treatments were administered. The bull was discharged on January 17, 1955.

On January 5, 1956 the bull was again presented at the clinic. At this time the bull was in extremely poor flesh and had refused to eat for 48 hours and had much difficulty drinking. However, it made frequent attempts to eat and did manage to swallow a small amount of grain. The swelling on the right mandible had almost doubled in size and numerous scabs were noted on the skin over the swelling. No open or draining fistulous tracts were observed. Radiograph No. 3874 revealed a greatly increased area of destruction of bone tissue with much irregular, unorganized new bone formation throughout

the lesion. The swelling protruded approximately 8 cm. from the normal ventral mandibular border and the soft tissues surrounding the lesion showed evidence of inflammation and early deposition of calcium. In view of the above findings, treatment was not initiated since there was no hope of improving or stabilizing the condition. The owner was advised to use the bull as long as he wished and then send it to slaughter, but the humane thing would be to slaughter him immediately. He decided to send the bull to slaughter immediately.

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* **Questionnaire**

(Continued from page 136)

- | | |
|---|-----|
| e. Other | 8% |
| f. Never vaccinate for both simultaneously | 12% |
| 25. Instruments Most Commonly Used for Opening Teats | |
| a. Lichtys or Yankee | 33% |
| b. Stools | 12% |
| c. Teat splitter | 41% |
| d. Other | 15% |
| 26. Treatment of Scirrhus Cord (Swine) | |
| a. No treatment | 4% |
| b. Surgical removal | 78% |
| c. Antibiotic | 44% |
| d. Other | 6% |
| 27. Calf Castration | |
| a. Emasculator | |
| 0 percent | 6% |
| 1 to 10 percent | 14% |
| 11 to 50 percent | 35% |
| 51 to 75 percent | 5% |
| 76 to 100 percent | 43% |

b. Knife

0 percent	5%
1 to 10 percent	24%
11 to 50 percent	31%
51 to 75 percent	22%
76 to 100 percent	34%

* Clinical Medicine

(Continued from page 185)

within the vagina. The fossa of the clitoris was examined and found to be about one inch deep and about one inch wide, twice the normal size for this particular dog. A clitoridectomy and removal of the dorsal wall of the fossa were then performed. The fossa beneath the clitoris was found to be inflamed and excessively secretory in nature, but happened to be devoid of any secretion or exudate at the time. The fossa was packed with gauze and 7 per cent iodine in an effort to destroy the secretory tissue. The dorsal vaginal wall and the ventral vaginal wall were sutured in two layers of interrupted stitches with 000 chromic catgut.

The skin was sutured with simple interrupted sutures of nylon.

The afternoon following surgery, the patient was found to be hemorrhaging quite severely from the vagina. Four cc. of koagamin® were given intramuscularly and a pressure pack was placed over the vulva. Hemorrhage had ceased by that night. The patient convalesced, was discharged, and now appears to be healing well upon reexamination.

— Keith Bates '56

Donald Allgood and Thomas Spencer were initiated into the Iowa State Chapter of Alpha Zeta, professional agriculture fraternity, at a banquet given in the Great Hall Memorial Union, April 19. Don and Tom were further honored when they were awarded Certificates of Merit by the Cardinal Key at the Leadership Awards banquet given in the South Ballroom, Memorial Union, on April 26. Don and Tom are both members of the Junior class.

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