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Expounding Cow Postpartum Disease from the Perspective of Chinese Veterinary Medicine

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Abstract: Among the diseases of dairy cows, postpartum diseases account for a high proportion and have the characteristics of high morbidity, causing great harm to dairy farming. Through a large number of clinical diagnosis cases, consulting the treatment methods of fellow veterinarians and summing up my clinical medication experience, we comprehensively adopted the Chinese veterinary method to solve the postpartum disease encountered in the dairy cattle breeding process. The diagnosis means are through four diagnostic methods: "looking, smelling, asking and cutting", and through the combination of Chinese veterinary prescriptions, then treat according to syndrome differentiation, strengthen the right and eliminate the evil, and harmonize yin and yang, the preparation of traditional Chinese medicine, the perfusion of sick cattle, the Chinese herbal medicine prescriptions for clearing heat and detoxifying, promoting blood circulation and removing stasis, and removing corruption, pus, and the observation after medication, have achieved good effects, especially in cases caused by fetal coat stasis, abortion, stillbirth and other symptoms. This article summarized the types (postpartum fever, blood halo, blood deficiency, sweating, postpartum lochia, postpartum wind, postpartum paralysis), etiology, clinical symptoms, TCM treatment principles and prescriptions of postpartum diseases from the point of view of middle veterinarians, After treatment, have a large number of cows with postpartum diseases have recovered.

Keywords: Cattle, Chinese Veterinarian, Postpartum Disease, Treatment, Prescription

1. Introduction

Cow postpartum disease is a disease related to production that occurs within one month after delivery. This paper focuses on the etiology, clinical symptoms, treatment principles and traditional Chinese medicine prescriptions of cow postpartum fever, blood halo, blood deficiency, sweating, postpartum lochia, postpartum wind, postpartum paralysis and other types of diseases from the perspective of Chinese veterinary medicine.

2. Postpartum Fever and Postpartum Blood Halo

The cow was not treated in time after abortion, resulting in deficiency of blood and Qi, hot wind in summer, internal invasion of evil and toxin, and the heat in the body could not be discharged, resulting in cow fever. The sick cattle are in low spirits, have no appetite, waste rumination, thirsty, like drinking water, and reduce lactation. The tongue is reddish, the tongue coating is thin and yellow, and the number of veins is weak. Treatment principle: clearing heat and cooling blood, promoting blood circulation and removing blood stasis [1]. Traditional Chinese medicine prescription: Huanglian Jiedu Decoction, oral, 1 dose per day. Due to excessive postpartum blood loss, cows suddenly appear in a trance, unable to get up on the ground, look sluggish, or even coma. It is often seen in pre natal weak cows. The symptoms can be divided into blood heat Yang excess type and blood deficiency Qi deficiency type. Blood heat type, the disease is seen in cows with massive

postpartum vaginal bleeding, limb shaking, conjunctival congestion, systemic fever, dry mouth, red tongue, yellow tongue coating and stringy pulse number. The syndrome of blood deficiency and Qi detachment is characterized by no loss of placenta, more blood loss, limp limbs, more than cold sweat, white oral mucosa, light tongue without or less moss, weak and empty pulse number [2]. Treatment principle: clearing away heat and solidifying meridians, supplementing qi and calming nerves, supporting yang and collecting blood. Prescription of traditional Chinese medicine: blood heat Yang Sheng type: Astragalus membranaceus, Angelica sinensis and Shengdi, etc; Blood deficiency and Qi disfigurement, reuse dangshen, yam and aconite, etc. Oral administration, 1 dose per day [3].

3. Postpartum Deficiency Cold and Blood Deficiency

Cows suffer from Yin blood loss due to massive milk production or repeated labor after delivery. In addition, they consume physical strength during delivery, resulting in insufficient Qi and blood and weak Qi. The disease can also be caused by prolonged labor or lactation in some cows. The sick cow has low head and earlobe, weak and slow movement, loss of appetite, matted coat and pale conjunctiva [4]. The mouth color is light and red, and the pulse number is floating and weak. In severe cases, the heart rate is too fast and the wheezing is thick and large. Treatment principle: replenish and strengthen the body, strengthen the spleen and stomach. Traditional Chinese medicine prescription: Bazhen decoction is added or subtracted, Angelica sinensis, Atractylodes macrocephala and poria cocos are reused, taken by gavage, 1 dose a day.

4. Postpartum Sweating and Postpartum Roar

The cow suffers from severe blood and blood injury after delivery, which can be treated and relieved, hot flashes and night sweats, and sweating is not stopped [5]; People with lung disease have asthma, cough and fever, consume lung qi, and have unstable watch and night sweat. The sick cow was depressed, sweating constantly, cold limbs, ears and nose, pale conjunctiva, sunken eyeball, less fluid and weak pulse. Treatment principle: Nourishing Yin and strengthening water, replenishing fluid and solidifying the surface. Traditional Chinese medicine prescription: add or subtract Liuwei Dihuang decoction or Fuzi decoction, take it by gavage, 1 dose a day. Cows roar after childbirth, which consumes blood and causes restlessness and constant roaring. Most of them are due to postpartum blood consumption and injury, and heart qi deficiency leads to poor blood operation, resulting in the non excretion of residual blood in the uterus, fetal membranes and other harmful substances. The affected cattle have poor spirit, dry nose, reduced appetite and rumination. The body temperature rises, the heart rate and breathing speed up, and the lochia lasts for several days after delivery, which leads to the continuous roaring of cattle [6]. Treatment principle: promoting blood circulation and removing blood stasis, tonifying the heart and calming the mind. Traditional Chinese medicine prescription: add or subtract Xuefu Zhuban decoction, take it by gavage, 1 dose a day.

5. Postpartum Edema and Postpartum Milk Deficiency

Cow postpartum edema is a disease caused by abnormal blood circulation or abnormal secretion of estrogen such as progesterone. Most of them are due to the weakness of the spleen and kidney before delivery, the deficiency of the Yang of the spleen and kidney after delivery, the loss of healthy movement of the spleen, the failure of the kidney to make water, the inability to transport water and dampness, and the edema caused by overflow on the skin and limbs [7]. The affected cattle are lean, with dull hair, less spirit, fatigue, high skin temperature and edema in limbs or under abdomen. Mouth fluid is less, pulse is thin or weak. Treatment principle: tonifying qi and blood, promoting dampness and detumescence, and protecting the heart. Traditional Chinese medicine prescription: add or subtract Buqi Tuoli Huxin powder, take it by gavage, 1 dose a day [8]. Cow postpartum due to lack of Qi and blood, resulting in lack of milk or no milk, also known as no milk or no milk. Suffering from excessive prenatal labor, malnutrition, emaciation and biochemical milk disorder of cattle; Or too much feeding, less labor and insufficient exercise, resulting in stagnation of Qi and blood, blocked meridians and lack of biochemical milk; Cows are too young, underdeveloped and dystocic, resulting in lack of milk [9]. Cow: breast shrinkage and soft shrinkage; Little or no milk; Slow and weak pulse; Smooth tongue without moss. Treatment principle: tonifying qi and nourishing blood, both dredging and tonifying. Traditional Chinese medicine prescription: modified pig hoof soup, oral, 1 dose a day.

6. Postpartum Hemorrhage and Postpartum Abdominal Pain

Most of them occur in primiparous cows. In the process of production, dystocia or improper artificial midwifery cause uterine and vaginal damage, leading to rupture of large blood vessels and massive postpartum blood loss. Cows with long-term postpartum hemorrhage are in low spirits, greatly reduce their appetite, and their body temperature drops rapidly below the normal range [10]. There is a large amount of bright red blood flowing out of the vulva when lying on the ground. Check for blood clots in the vagina and uterus, pain in the hindquarters, and frequently review the abdomen. Treatment principle: replenish qi and strengthen absorption, replenish blood and nourish blood. Traditional Chinese medicine prescription: wulingzhi, Angelica sinensis, fried cypress leaves, Sanguisorba charcoal, raw Sanguisorba charcoal, jiaozhizi,

fried Puhuang and chuanxiong, etc. take it by gavage, 1 dose a day. Suffering from postpartum abdominal pain in cattle. It occurs frequently in winter and spring, usually 6 ~ 120 hours postpartum. It is often seen in old, weak or premature cattle, and the earlier the onset occurs, the more serious the abdominal pain of cattle. Main inducements: unscientific production process or postpartum care, Yin cold evil or damp heat evil invading the uterus, poor operation of Qi and blood, excessive loss of nourishment of cellular veins, dystocia and abdominal pain; Or excessive labor or unbalanced nutrition, weakness of cattle, postpartum blood loss or massive loss of blood, resulting in no blood support for Qi, loss of Qi dependence, loss of Qi with blood, abnormal movement of Qi rise and fall, abnormal cellular pulse and abdominal pain; Postpartum fetal coat does not fall or fetal coat peeling is not clean, lochia has not been exhausted for a long time, liver qi stagnation, qi stagnation and blood stasis, blood stasis stagnates the uterus, and blood stasis blocks the cell vessels, resulting in abdominal pain. According to the clinical symptoms, postpartum abdominal pain can be divided into cold coagulation and blood stasis type, Qi and blood weakness type and blood stasis fever type. Treatment principle: cold coagulation and blood stasis type should warm meridians and dissipate cold, promote blood circulation and relieve pain; Qi and blood weak type should be invigorating qi and blood, promoting blood circulation and relieving pain; Blood stasis fever type should promote blood circulation, remove blood stasis, clear away heat and detoxify [11]. Traditional Chinese medicine prescription: modified Shenghua decoction; Danggui Zhitong decoction. Oral administration, 1 dose per day.

7. Postpartum Diarrhea and Postpartum Lochia

Cow is a disease of postpartum gastrointestinal dysfunction, sparse feces and increased stool. This disease occurs frequently in cows with malnutrition, old age, weakness, twins or fetal failure. The cow's postpartum vitality is greatly weakened, the Qi deficiency is greatly damaged, the transportation of Qi and fluid is abnormal, and the endogenous dampness evil causes diarrhea. Feces are thin and dark, as thin as mud soup, filthy and smelly. Rumen peristalsis sound is low and intestinal sound is enhanced. Patients with long-term diarrhea have sunken eyes, loss of appetite and decreased milk production [12, 21]. There were no significant changes in body temperature, respiration and heart rate. Treatment principle: Invigorating Qi and spleen, stopping diarrhea and replenishing fluids, clearing away heat and dampness, promoting blood circulation and removing blood stasis. Prescription of traditional Chinese medicine: Astragalus membranaceus, Coptis chinensis, Magnolia, radix paeoniae rubra, pollen Typhae charcoal, Magnolia officinalis, Platycodon grandiflorum, tangerine peel charcoal, Fructus aurantii, betel nut, hawthorn and Shenqu, etc. take it by gavage, 1 dose a day. Cows still shed light red or dark red turbid bodies, arched backs and nuggets from the vulva 7 ~ 10 days after delivery. The cause of the disease is malnutrition, excessive labor and imbalance of drinking water before delivery, resulting in emaciation, dystocia, loss of vitality, inability to recover the uterine body, Qi deficiency, inability to absorb blood, and blood overflow outside the veins; Or postpartum care, cold and other pathogens invade the mother, cold coagulation stagnation and sluggish; Or it is caused by injury to the uterus during midwifery or stripping of the placenta, or infection such as dystocia, retained placenta, uterine prolapse or stillbirth. Postpartum lochia can be divided into Qi deficiency type and blood stasis type [14]. Qi deficiency type: a large amount of light red and thin dirty liquid flows out of the vulva of the affected cattle, which is not smelly, the mouth color is light white, the pulse is weak, and the body temperature generally has no change. Blood stasis type: the infected cow flows out of the vagina with dark purple dirty liquid or black blood clot, with foul smell, elevated body temperature, red mouth color and string pulse number. Treatment principle: promoting blood circulation and removing blood stasis, clearing heat and detoxification, tonifying the heart and calming the mind. Traditional Chinese medicine prescription: Jiawei Buzhong Yiqi Decoction; Modified biochemical soup. Oral administration, 1 dose per day.

8. Postpartum Wind and Postpartum Paralysis

High yield dairy cows suffer from limb paralysis caused by wind cold after delivery, which is mainly due to unscientific feeding and management, unbalanced nutrition, large lactation and insufficient exercise, resulting in the reduction of calcium and blood glucose. In addition, the delivery time is long, the Qi and blood are weak, and the external wind cold, wind evil and deficiency invasion are transmitted to the meridians, leading to the obstruction of meridians. Postpartum wind is divided into acute postpartum wind and chronic postpartum wind. The acute type occurred within 3 days after delivery; Chronic multiple disease occurred after 3 days postpartum. [13, 20]. The affected cattle are in low spirits, have less appetite, stop or reduce the number of rumination, have weak limbs, unstable gait, prefer to lie down and stand less, and sometimes have a cold sweat. Treatment principle: dispel wind, strengthen stomach, dredge meridians and activate collaterals. Traditional Chinese medicine prescription: Jianwei Fengshi powder, oral, 1 dose per day [17]. An acute and dysfunctional disease occurs in cows 1 ~ 3 days after delivery, with loss of consciousness and quadriplegia as the main clinical symptoms. Also known as milk fever. It mostly occurs in high-yield cows and emaciated cows. The single feed, unbalanced or insufficient nutrition lead to the lack of Qi and blood of pregnant cows. In addition, a large amount of vitality is lost in the process of calving, the Qi of viscera is weakened, the resistance to evil is weak, and the blood calcium concentration drops sharply [15]. Postpartum paralysis is divided into typical production paralysis, atypical

production paralysis, low calcium and low phosphorus postpartum paralysis and muscle nerve injury paralysis. Typical production paralysis occurs 3~12 hours after delivery, with loss of appetite, cessation of rumen peristalsis, rumination, defecation and urination, drowsiness, weak corneal reflex, decreased body temperature, accelerated heartbeat, deep and slow breathing, irregular heart rate and untimely treatment. It is easy to die within 1 ~ 2 days [16, 18]. Atypical production paralysis and postpartum paralysis with low calcium and low phosphorus. The head and neck of the affected cow are twisted, bent in an "s" shape from the head to the scapula, and the skin and extremities are cold. Muscle and nerve injury paralysis, the affected cattle frequently try to stand, but their hind limbs cannot be fully straightened, their hind limbs move backward or assume a dog sitting posture, acupuncture pain is dull, the body temperature is normal or slightly low, the heart rate is accelerated, the hindquarters are obviously paralyzed, and calcium and phosphorus supplementation is ineffective [19]. Treatment principle: replenish qi and blood, relax Qi, relieve pain, diminish inflammation and supplement calcium. Traditional Chinese medicine prescription: Jiawei Guiqi Yimu Decoction; Calcium phosphorus magnesium injection. Oral administration, 1 dose per day.

9. Conclusion

There are many and complex types of postpartum diseases in cows. Pay attention to differential diagnosis and use the four diagnostic methods of "looking, smelling, asking and cutting". When using drugs, it is necessary to treat according to syndrome differentiation, determine the treatment principle and traditional Chinese medicine prescription, and treat both symptoms and signs. Scientific feeding and management, prevention first, prevention and control combined to reduce the incidence rate of cow postpartum disease and reduce the economic losses caused by the disease.

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