

## Izatzion application in the veterinary medicine

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Modern methods and technologies of farming demand a constant promotion of medical-preventive work quality. The existing methods and means of the treatment and prevention are imperfect, not always of high-performance and they mainly influenced only the disease etiological factor. Very important moment for the veterinary practice is the complete action of new methods and means, wide spectrum of their therapeutic influence.

Izatzion is the preparation of this type, developed and patented by the candidate of biological science Lozyuk L.V. and by the candidate of medical science Potopalskiy A.I. Izatzion belongs to the group of non toxic pharmacological substances. It doesn't have cancerogenic, teratogenic and embryotoxic effects, cumulative characteristics are absent as well and also it doesn't inhibit hematosi. Izatzion has a wide range of therapeutic influence due to the antiviral, antiphlogistic, bacteriostatic, fungistatic, analgesic, radio- and cryoprotector and immunomodulatory activity.

For the first time izatzion was approved in the poultry farming in 1978 in the Moscow veterinary academy and in the Leningrad National State Institute of fowl diseases. Izatzion and its medical forms minute study was held in DNSKI of veterinary preparations and fodder additions, Beekeeping Institute of the Russian Federation, National Agrarian University in Bila Cerkva and IMBG NASU. At present izatzion is registered as antiviral, antimicrobial and antiphlogistic preparation with wide activity spectrum. Interesting results were obtained by Izdepskiy V.Y., Rublenko M.V. and others regarding izatzion practical application with hogs, cows and rabbits. (recommendations...1997)

Pathogenesis complicacy of the inflammatory process urges the use of multiple-factor action preparations. Izatzion is one of them. We have approved it on all kinds of farming animals, dogs and cats. The preparation has to be injected directly to the purulent area or used with the help of bandages and drainages, during festering wounds, necrotic suppurative sores, after phlegmon and abscess autopsy and their ablution with antiseptic liquids. Wet paper is applied during subcutaneous wounds. If the wound is deep gauze or adsorbent drainage, wetted in the izatzion, has to be put inside of the wound and fixed by the provisional stitch. The bondage or drainage must be changed every 24-48 hours. The swelling of the wound borders decreases and they become movable in 1 or 2 days. The outflow of the purulent necrotic mass becomes stronger, pink small-grained granulation tissue appears under it.

Suppurating process of septic wounds under the izatzion influence entails by the decrease of the infection level. The researches show the bacterial-static izatzion characteristics regarding *St. epidermis* and *E. coli*. But *B. corrugantus* are not sensorial to it.

Preparation application with hogs, cattle and sheeps is the most significant.

Izatzion application along with fast and full wound cleansing provides defect closure by the tender granulation tissue with elastic newly generated collagen. We have to admit that due to this the epithelization process happens earlier and there is the possibility of putting secondary solid suture.

Deep and detailed pathogenetic substantiation of izatzion application during suppurating arthritis that is very difficult for the medical treatment and leads to the essential economic losses has been elaborated. The existing therapy methods of this pathology are ineffective because of their unilateral actions – antiseptic or antibacterial.

Izatzion is used locally as wet bondage that must be changed every 1-2 days, on the early stages of the disease during the period of serofibrinous and fibrinogenous exudation. Quite often

izatizon application leads to the recovering already on the early stages of the inflammation in the joint.

Izatizon must be injected directly into the joint area as a wet gauze bandage along with the surgical operation and antiseptic joint cleaning with during septic arthritis.

During osteoarthritis izatizon clinical effect exhibits in the decrease or elimination of purulent-resorptive fever signs, regional phlebit and trombophlebitis decrease. Necrotic tissues in the joint area easily segregate and resolve that is the proteolytic reaction activation in the pathologic focus area.

Animals recover from purulent arthritis in 3-3,5 weeks if we treat them with izatizon, while if we use traditional methods of the treatment recovery will be observed only in 1,5-2 months.

Fast gaining of positive result, decongestion, cleaning of infected tissues from necrotic suppurative dentritis in 4-5 days with active wound surfaces granulation – these are the typical medicinal izatizon effects during necrotic suppurative processes.

Izatizon bondages give soft anesthetic and apparent antiphlogistic effect during strains, aseptic bursitis, tendovaginitis and arthritis. These bondages also stabilize blood circulation and lymphokinesia in the injury area, normalize metabolism in the collagen structures and prevent chronization process, contribute to the fast renovation of the lost limb function.

#### **Izatizon application during obstetric-gynecologic pathology.**

Izatizon as a complex action preparation is very perspective for medical treatment of cattle obstetric and gynecologic pathology.

Very often, the reason of animal barrenness lays in different endometritis clinical forms. According to our data, endometritis is being registered with 10-72% of cows on the live farming of Kyiv region.

The treatment of this pathology is rather difficult, laborious and not always effective.

Izatizon in the dose of 50 ml. was injected to the womb during postnatal endometritis. 10ml. of 10% Novocaine solution must be injected intra-abdominally in 10-15 min. before manipulation. Repeated injections of preparation have been carried out every 48 hours till complete recovery of the animal. Wide application of this method on Vasylykiv, Fastiv, Bila Cerkva and Pereyaslov-Khmelnytskyi live farming has shown that the treatment duration is 6,7+0,3 days with 3,5+0,1 of medical procedures. Generally adopted means – ASD-2, ichthyol, folliculin, estrophan and novocaine – give the indexes regarding treatment duration from 7,7+0,3 to 9,5+0,5 days. Erythrogenesis, leucopoiesis and endocrine gland function were stabilizing along with clinical improvement of animal condition.

Izatizon application gives the possibility to reach the 93,5% insemination level of recovered cows with 26,5+5,2 days of unproductive duration. Whereas the traditional methods have the indexes of 53,8-80% and 41-48 days respectively. Medical effect of izatizon and novocaine intra-abdominal injection combined application can be achieved due to the increase of organism safety adaptive reactions, blood circulation and lymphokinesia improvement in the womb tissues, metabolic processes normalization that exhibits in pain decrease, increase of myometrium contraction function, enhancement of exudation and acceleration of womb involution processes.

So, izatizon is a medical system where all ingredients are active. Each of them controls its personal inflammation factor: excessive aqutation, necrosis, infection inhibition, pain syndrome, evacuation and infection inhibition on the initial phase, regeneration process stimulation on the second phase of the inflammation process.