

TREATMENT OF TUBULAR BONE FRACTURES IN DOGS WITH EXTERNAL FIXATIVES

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SUMMARY

The article provides information on external bone fixatives and outlines the advantages of external fixatives over conservative methods.

Keywords: Elizarov apparatus, orthopedics, Interamedular, X-ray diagnostics, asepsis and antiseptics, osteosynthesis, conservative.

RELEVANCE OF THE TOPIC

Today, service dogs are used in many areas. Service dogs provide invaluable assistance in guarding state borders, special military facilities, valuable national treasures, apprehending criminals, search and rescue operations, customs checkpoints, and detecting damage to precious minerals and ores and gas pipelines. Dogs are shepherds, guide the blind, and help people in many ways. Demand for this specialty has grown significantly as a result of recent corporate scandals. as the number of dogs increases, so do diseases, including bone fractures. In animals, bone fractures can occur in a variety of ways. Currently, there are many accidents caused by road accidents, falls from different heights during training, and bone fractures. Bone fractures are a problem for animal owners as well as for veterinarians. For the first time in Uzbekistan, the Elizarov apparatus was used in the field of veterinary medicine to ensure the correct and accurate healing of bone fractures. The installation is of great scientific and practical importance.

LEVEL OF STUDY OF THE TOPIC

At present, in the veterinary field of Uzbekistan in the treatment of bone fractures, conservative and surgical methods of interamedular and plate placement are introduced.

The issue of immobilization of bone fractures has been of great importance since ancient times. Combined with the correct comparison of bone fragments, it is believed that there was an orthopedic approach to the treatment of broken bones at that time. Further development of methods of treatment of fractures occurred due to the representatives of the Arab and Greek Roman schools. Emphasis was placed on proper placement and reliable fixation.

After the opening of the Moscow School of Medical Surgery in Russia in 1707, the alignment of bones began to develop rapidly. The first Russian scientist-traumatologist O.E. Mukhin (1766-1850) His first book on the science of bone fusion was the first textbook of traumatology in Russian.

The development of the field of traumatology is inextricably linked with the name of the famous Russian scientist N.I. Pirogov (1810-1881), who developed immobilization of bone fractures with plaster casts in military field surgery, and to this day is widely used in veterinary and medical fields. is being used. Later, X-rays made it easier to diagnose, and aseptic and antiseptic procedures made it easier to treat tubular bone fractures. Later, in Russia in 1914, L.S. Sapojnikov introduced the use of stainless steel, which is fastened to the bone canal in dogs in the treatment of intramedullary osteosynthesis, that is, bone fractures, in the treatment of tubular fractures in dogs. It was later used in medical practice for intramedullary osteosynthesis in human femur. In the mid-1950s, intramedullary fixation began to be used for various fractures of tubular bones.

Beydik.O.V. In 2002, Lambotte proposed a plate with a screw for bone osteosynthesis in 1913. This plate is widely used in medical and veterinary traumatology. Bone osteosynthesis in Russia was first performed in 1910 by Larence using the Lane method. Later, bone osteosynthesis became widely used not only in small but also large animals. In addition, according to some authors, large animals can reliably press on the operated organ immediately after surgery, and the lameness almost disappears within a week. Almost simultaneously, a number of publications appeared, highlighting certain advantages of external osteosynthesis. In 1988, Polyakov V.A. writes about the author that external fixation reduces time by half compared to intramedullary osteosynthesis. Other researchers have written about the benefits of external fixation in terms of the rigidity and stability of bone fragments, which help these fragments move faster in the joints by forming faster bone wraps.

In some cases, unsatisfactory results in the treatment of patients with fractures, oblique, spiral fractures have led to the use of additional fastening with wire, metal or screws.

External fixation helps to create optimal conditions for the rapid integration of bone fragments. External fixation is still used today in bone osteosynthesis. [1; 2; 12]

Conservative treatment alone is not enough, as it does not allow the broken and broken bones to be put back in place. Even when used in closed fractures, it can cause broken bones to heal incorrectly and become brittle, but open fractures can cause many problems. First of all, it is impossible to control the proper formation of bones, gypsum ligaments with excessive compression disrupt the activity of blood vessels. [2]

Conservative treatment of bone fractures in pets where extramedullary osteosynthesis is more active in pets is now irrelevant and outdated. Complications of conservative treatment can include bone deformities as well as the formation of incorrect joints. Surgical treatment of pet fractures creates favorable conditions for bone strengthening. [2; 3]

In small pets, dogs and cats have a high incidence of tubular bone fractures, and experiments have been performed to ensure that they heal properly. We used Kirschner spitzals and plates. In cats treated with Kirschner needles, additional biochemical tests were required when the healing process was quick and inexpensive using plates. [1; 4]

Unfortunately, pets often suffer serious injuries as a result of falls from heights, blows, games, exercises, or collisions — fractures of joints, jaw bones, and front and back legs. One of the most effective methods currently used for complex fractures with a large number of bone fragments is the Elizarov method, which uses an individual metal structure to externally fasten bone tissue.

In order to grow bones, plates are used in combination with external fixators, and bones are grown using distracting methods. Experimental wire intramedullary osteosynthesis was 1 mm per day, and 1.4 mm for bone growth using a plate with an external fixator. [6]

In recent years, a number of external fixatives for osteosynthesis have been developed in veterinary practice. For example, Schens screws, Kirschner wires, and various Elizarov devices, the most suitable of which is the Elizarov device, which is the most suitable method for the correct use of bones. External fasteners Elizarov apparatus they are structurally universal. Because they allow the fasteners to be held in different directions in different planes, they reduce the sliding force of the parts. [6; 7]

External fixation of the bones gives the wound extra width to adjust the fixation frame after surgery. Postoperative frame adjustments can enhance fracture healing or correct fractures in the early stages of a fracture.

In addition, external fixation allows unobstructed access to any connected wounds that require open wound healing.

In dogs, tubular bone fractures are large and small, and in fractures and fractures of the wrist and elbow, mainly external fixation methods are proposed. [8; 9; 11; 15]

External clamps do not take much time to install and the installation technique is not difficult. For small animals, installing an external clamp on Kirschner wires is easy and inexpensive, and does not take much time. [10; 13; 14]

CONCLUSION

In summary, external fixation allows bone formation to be completed more quickly and accurately than conservative methods in bone fractures, and external fixation is easier and cheaper to install.

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