BULLFIGHTING VERSUS ANIMAL WELFARE

JE Zaldívar1, W Sánchez-Suárez1,2, M Ibáñez1,3, V Iniesta1,4, R Luna1, A I Marin1, R Sáez1, E Vicente1 y M Gallego1

1 Veterinary Association for the Abolition of Bullfighting (AVAT), Spain
2 Department of Animal and Poultry Science, University of Guelph, Canada
3 Clinical Ethology Service, Animal Psychiatry, Complutense University of Madrid, Spain
4 Department of Animal Health, University of Extremadura, Spain

avadaeta@gmail.com

Introduction

Bullfighting is a public traditional spectacle in Spain, Portugal, southern France and some Latin American countries that involves intense animal suffering. Its Spanish version typically finishes once the bull undergoes a series of mortal wounds, while in France it is more of a game. Bullfighting is divided into three parts: tercio de varas (the “third of lancing”), tercio de banderillas (the “third of piercing”) and tercio de muerte (“the third of death”).

First part of the bullfight: “Tercio de varas”

In this part, a rider on horseback (picador) stab a spear (puya) several times into the dorsal area of the bull’s neck, close to the withers area (Fig. 1A & B). The puya is a lance with sharp tip in the shape of a pyramid (7.6 to 8.9 cm), and each one of its edges are like the blade of a scalpel. This puncture opens up to 7 different wounds of an average length of 20 cm. The puya produces serious damage 1-3 in muscles, tendons, ligaments, blood vessels, nerves (dorsal to the spinal and brachial plexus), spinous and transverse processes of dorsal vertebrae, ribs and their cartilages, and scapulas and their cartilage. It is also able to cause pneumothorax. The bull can lose between the 8 and 18% (3 to 6.7) of its blood volume (Fig.1C). The bleeding results in the plugging of the spinal canal. The real goal of this part of the bullfight is to cut the neck muscles of the bull, so that he will be unable to lift his head anymore, and weaken the animal by the loss of blood 3.

Second part of the bullfight: “Tercio de banderillas”

In this part, six harpoons called banderillas are planted into the shoulders of the bull (Fig. 2A). They are metal pieces of 6 cm long, mounted on wooden sticks. They dig into the injured areas, increasing the pain already inflicted by the puya with every movement the bull makes. The banderillas cut the muscles and cause further loss of blood (Fig. 2B). If they do not achieve their objective, black banderillas (2 cm longer and wider) could be used.

Third part of the bullfight: “Tercio de muerte”

In the last part, the bulls are killed. The bullfighter stabs an 80-88 cm long sword (estoque) into the chest of the animal in order to destroy all anatomical structures that it finds in its path, including the heart and large blood vessels. This causes profound bleeding in the thoracic cavity and, therefore, a slow asphyxia. Sometimes the sword even pierces the diaphragm, and cuts the liver and stomach. The bull suffocates, it coughs lots of blood and finally collapses (Fig. 3A, B & C).

If the animal’s death is delayed, the bullfighter uses another sword called verduguito, which is introduced between the 1st and 2nd cervical vertebrae with the aim of severing the spinal cord and/or part of the brainstem.

(Fig.3D) This operation is called descalabado. As a consequence, the bull suffers from quadriplegia and, therefore, is unable to move. Next, the bullfighter’s assistant stabs a 10 cm knife blade (called puntilla) into the occipitocantal space (Fig. 3E & F), slicing the medulla oblongata and producing a slow stop of cardiac and respiratory functions, thus impairing blood flow and sensory input to the brain. This method was banned in EU slaughterhouses due to its cruelty. Often, the bull is only paralyzed and still feels the cutting of his ears and/or tail, which is a reward for the bullfighter. Scientific studies show that 90% of the cattle slaughtered in South America by puntilla had consciousness neurological correlates compatible with life during bleeding 3.

Other lesions produced during the bullfight

Besides the anatomical damages described, the postmortem studies show that 60% of the animals after a bullfight have fractures and fissures of the skull due to the shock against the picador’s horse stirrup, an iron structure weighing 30 kg. The bull suffers an important loss of vision during the bullfight 3, and besides 28% of them show also serious eye injuries 4. Sometimes, breakage of horns and limb fractures also occurs.

Physiological alterations observed

Previous studies 5, 6, 7 have measured different blood parameters in these animals after they die in the bullring, and none of them were in the normal physiological range (Table 1). The 93.5% of the bulls show a pH values in blood under 7.35, that indicates a deep status of metabolic acidosis 6. This is caused by the considerable amount of lactate deposited in the organs and cells, as a consequence of the inability of these herbivores to cope to the strenuous exercise they are forced to undergo, which promotes also significant muscle injury 7. In fact, there is a high incidence of falls during the fight. Most parameters involved in the regulation of acid-base balance by respiratory function are below those considered physiological 6. Only the PCO2 is increased, as a consequence of bull’s inability to remove CO2 from the blood. Besides, hematocrit and hemoglobin concentration are increased, due to the muscular effort made (which produces lactic acidosis), the stress suffered by the bull (which produces a spleen contraction) and the hemocconcentration (caused by bleeding, sweating and sometimes inadequate breathing). Stress induces also a decrease in neutrophils and decrease in lymphocytes in blood counts. Both glucose and triglycerides also showed values above physiological range (Table 1), certainly due to mobilization of energy reserves required to cope with the effort during fighting 6. Finally, they all show high concentrations of endorphins, hormones that are correlated with states of acidosis, bleeding, pain, trauma, injury, hypoxia, stress, high muscle damage, hyperglicemia, cognitive deficits, hypofibrinogenemia and immunosuppression.

CONCLUSION

As veterinarians we believe that this type of show clearly violates the minimum animal welfare standards, and represents one of the most terrible expressions of animal abuse.

REFERENCES