

stabilize patients; since 1993, the injured have been transferred to hospitals for definitive treatment. This is probably the reason why the wages are low. In other words, bullring doctors in Mexico do not live off bullfighting — they attend these events out of interest, respect for the bullfighter, and passion for the *fiesta*; 3) *Abandonment by professional and academic institutions* — on this point, I differ a bit with Dr. Ríos since the Spanish Society of *Taurina* Surgery has existed in Spain since February 28, 1976,¹ with 314 members to date, while the Mexican Chapter of the International Society of *Taurina* Surgery has existed since December 17, 1974, with 182 members; 4) *Lack of a body of doctrine* — in Mexico, the doctors present at the bullring are a group of specialists from different disciplines and members of the Mexican Chapter of the International Society of *Taurina* Surgery, which holds national congresses every year and international conferences every 2 years in America or Europe. Their training includes one or more of the following courses: Comprehensive Management of Injuries in Bullfighting Events (MILETOS), Urgent Management in the Bullring (MUR) and/or Prehospital Care in Polytrauma Patients from Bullfighting Events,² as well as years of experience in the management of patients injured by bulls at bullrings. With the above, these doctors have been trained as specialists in bullfighting-related trauma and surgery. However, there is certainly a lack of a doctrine to certify the adequate training of medical personnel who treat patients with bull-related injuries.

As for the bull-related festivities outside the bullrings in Mexico, hundreds take place per year. Reported figures from articles show that, per year, on average 10 people are injured due to bull events held outside bullrings, with a mortality rate of 10 per 1000 injured persons.³⁻⁶ When we compare this figure with Miñano's thesis, which reviewed 971 injuries in bullrings and reported a mortality rate of 2.9 per 1000 persons injured,⁷ this merits attention. However, when reviewing a study carried out in the United States of America about injuries caused by bulls outside of bull-related events, I found that 12 000 cases were reported in 3 years, with a mortality of 57% in an analysis of 267 injured people,⁸ which sounds alarming. Therefore, beyond bullfighting festivities, all doctors should have solid preparation in the surgery of bull-related trauma injuries.

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Marco Antonio Ayala-García

Coordinación Clínica de Cirugía, Hospital General Regional No. 58 del Instituto Mexicano del Seguro Social, León, Guanajuato, Mexico

E-mail address: drmarcoayala@hotmail.com

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Reply to editor letter[☆]

Respuesta a carta al director

Dear Editor,

I would like to thank Dr. Ayala¹ for his comments. I should point out that the article² tries to give an overview of the

complex current problems of bullfighting-related surgery in Spain, but it is impossible to address all its facets in depth. Furthermore, this situation is not specific to Spain, as it also affects the three European (Spain, France and Portugal) and five Latin American (Mexico, Venezuela, Colombia, Peru and

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Ecuador) tauromachy countries. In addition, each country presents its own peculiarities.

Moreover, we should not forget that, although bullfighting festivals are traditionally attributed to Iberian and Latin American cultures, bull-related events also exist throughout the world. It is also important to emphasize that the experience obtained in bullfighting surgery is useful in the management of the thousands of patients around the world injured by cattle and other animals with antlers or horns. Thus, as indicated by Dr. Ayala, mortality rates in the medical care of bullfighting festivals decreases, but, in contrast, it is high among patients injured by these animals in countries without a bullfighting tradition. For example, the series by Sheldon et al.³ in the United States, reports a mortality rate of 57% among those injured by bulls outside of bull-related events, and one of the factors indicated is the preparation of surgical care teams.

In this context, I would like to highlight the experience of the Castellón group that was recently published in *The American Journal of Surgery*⁴, where they analyze the management of bull horn injuries. This study highlights that these are lesions with specific intrinsic characteristics that require regulated medical and surgical care. Likewise, it is very important to note that, during a bullfighting event, the patient is treated immediately after the injury because the surgical team is *in situ*. However, in injuries occurring outside of organized events, the patient must be transferred to the hospital and care is delayed, which leads to higher morbidity and mortality. Thus, in addition to adequate medical and surgical training, early care is also an essential factor.

Regarding the comments made by Dr. Ayala, as he himself indicates, the situation in Mexico is similar to that in Spain, both due to loss of social prestige and low economic remuneration. In addition, these situations are linked to each other. He also recalls the words of Máximo García de la Torre, “Being a doctor for bullfighters was never financially profitable, but it is an honor”. This was so since, although it did not generate significant income, tauromachy brought social prestige and political recognition that compensated for the economic precariousness of such an activity. Currently, with the loss of socio-political prestige, it becomes difficult to maintain an activity that is poorly paid and carries no or almost no other recognition of any kind.

On the other hand, as Dr. Ayala points out, the bullring doctors do not ‘live off bullfighting’ and frequently go to bullfighting events as a hobby and for the ‘love of the *fiesta*’. This situation is also seen in Spain and in other countries with a bullfighting tradition. However, it should be noted that bullfights represent 1.92% of all bull-related festivals in Spain, *novilladas* (bullfighting with young bulls) with *picadores* on horseback 1.13%, *novilladas* without *picadores* 1.39%, and *rejoneo* (bullfight entirely on horseback) only 0.88%². That is to say, as a hobby it is difficult to go to more than 7%–8% of all bull-related events. In contrast, in the vast majority of the remaining bull-

related festivals — more than 17 000 in Spain — people do not usually go as a hobby; also, the profile of patients injured at this type of festivities is completely different, and the volume of injured patients is much higher⁵.

Lastly, I agree with Dr. Ayala about professional and academic institutions, indicating the existence of the Spanish Society of Taurina Surgery and the Mexican Chapter of the International Society of Taurina Surgery. But it must be clarified that these institutions are very much aimed at bullfighting events held in bullrings, and thus most of their members are components of *in situ* bullfighting surgery teams at bullrings. However, as mentioned above, most bull-related festivities and injuries occur outside the bullring during popular bull festivals. In addition, the bullfighting conferences and training courses referred to by Dr. Ayala (Comprehensive Management of Injured in Bullfighting Events [MILETOS], Urgent Management in the Bullring [MUR] and/or Prehospital Care for Polytraumatized Patients of Taurina Events, etc.) mostly focus on events held in bullrings.

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Antonio Ríos^{abc}

^aServicio de Cirugía General y de Aparato Digestivo, Instituto Murciano de Investigación Bio-Sanitaria Virgen de la Arrixaca (IMIB-Arrixaca), Murcia, Spain

^bDepartamentos de Cirugía, Pediatría, y Obstetricia y Ginecología, Universidad de Murcia, Murcia, Spain

^cCirugía Taurina Dr. del Vas, Murcia, Spain

E-mail addresses: arorios@um.es, arorios4@gmail.com

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