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Letter to the Editor

☐ CRUSH SYNDROME: A CASE REPORT AND REVIEW OF THE LITERATURE

☐ To the Editor:

We have read with great interest the clinical review entitled "Crush syndrome: A case report and review of the literature," by Drs. Genthon and Wilcox (1).

We have some concerns with regard to this article; these concerns and corresponding replies by the authors may more clearly define this complex topic for the readership of this journal.

First, the authors concluded that, "Compartment syndrome is a common complication, and prompt fasciotomies should be performed when compartment syndrome is present." We think this suggestion is not correct and, when followed, may result in many life-threatening complications in crush victims. This is mainly because it has been well defined that fasciotomies in crush victims are significant risk factors for sepsis, and sepsis, in its turn, is associated with mortality (2). Therefore, fasciotomies should not be undertaken unless clear, objective indications are present. The measurement of intramuscular pressure provides an objective parameter for the decision to perform fasciotomy. In nonhypotensive patients, this should be done when the intramuscular pressure exceeds 50 mm Hg or if pressure values between 30 and 50 mm Hg show no tendency to decrease after a maximum of 6 h (3).

Second, the authors mention that, "… crush syndrome, also known as traumatic rhabdomyolysis, is the systemic manifestation of the breakdown of muscle cells with release of contents into the circulation." We think this statement should be revised, because not all cases of traumatic rhabdomyolysis result in crush syndrome; the latter is a systemic disorder, as already underlined by the authors.

Third, it is mentioned that, "Skeletal muscle can generally tolerate up to 2 h of ischemia without permanent injury." To our knowledge, crush syndrome may develop after 1 h of muscle compression or even 0.5 h of compression (e.g., the Marmara earthquake experience) (4).

Finally, we have difficulty understanding why the authors did not cite the recent crush guidelines, which were prepared by an international expert group with extensive experience in the treatment of crush victims, and include many pragmatic recommendations for the treatment of disaster crush victims (5). We think that doing this denies the reader an important piece of information that might save many lives in practice.

Despite these concerns, we think that the authors should be congratulated because they have drawn the attention of the medical community to this vital, but usually neglected, topic.

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