

## LETTER TO THE EDITOR ΓΡΑΜΜΑ ΠΡΟΣ ΤΟΝ ΕΚΔΟΤΗ

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### Envenomation by weever fish A challenging condition to treat

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We read the article by Toumanidis AM published in this Journal with data of 160 patients who were treated due to stings by weever fish from May 2000 to June 2022.<sup>1</sup> Usual effects of this envenomation are neurotoxic and hemotoxic, with intense pain, followed by numbness and proximal edema, besides of nausea and systemic symptoms.<sup>1</sup> His study included 99 females, 35 males, and 26 children, with an age range between 12 and 67 years; and the sites of the stings were 95.6% on the feet and 4.4% on the hands.<sup>1</sup> The preconized immediate treatment consists of xylocaine or lidocaine injections in the local site of stings, corticosteroid ointment on the affected areas, and methylprednisolone; all patients must keep rest during 6 hours, with the affected extremity elevated, and those managed within 30 minutes of the stings can present total resolution in up to 24 hours.<sup>1</sup> The author cited this method in all patients and 85% had total resolution within one day, and 24 had residual symptoms due to major degree of edema, or the little toe necrosis; worthy of note, eighteen out of these 24 patients underwent management with warmth.<sup>1</sup> He also emphasized that hot water or other kind of heat is only for exceptional cases, and that the utilization of cold packs or wrapped ice might also be an effective management.<sup>1</sup> Considering the estimated 50,000 fish stings in the world yearly, with some fatalities, and hundreds of envenom-

ations by the venoms of weever fish (mainly in the eastern Mediterranean region, eastern Atlantic Ocean, North Sea, and European coastal areas), it seems opportune to add short comments on other new literature data about this issue.<sup>2-5</sup> The incomplete knowledge about the fish venoms composition and mechanisms of action still constitutes an embarrassment to the elaboration of an effective treatment protocol.<sup>2</sup> The venoms of the lesser (*Echiichthys vipera*) and the greater (*Trachinus draco*) weever fishes are not duly studied, except for cytolytins, trachinine and dracotoxin, respectively.<sup>4</sup> Although the main symptoms are related to inflammation and nociception disorders, the systemic envenomation may cause cardiorespiratory and blood pressure disturbances.<sup>4</sup> The site of the sting becomes erythematous and edematous and necrosis may further develop; fever, arthralgia, cardiac arrhythmias and tonic-clonic seizures can also occur.<sup>4</sup> Delibes et al described a 35-year-old woman who presented with generalized body aches and emergency respiratory distress and hoarseness after to the weever fish sting, and the authors emphasized the rarity of patients stung on the neck causing emergency.<sup>3</sup> Paolino et al reviewed venomous bites, stings and poisoning by vertebrates, including the Weever fishes (family *Trachinidae*) producers of dracotoxin (hemolysis and necrosis), trachinine (neurotoxicity), phosphatase, proteinase, serotonin and histamine.<sup>5</sup>

They stressed the immediate help to patient reach the care as soon as possible, the remotion of barbs, disinfection of the sting site, immersion of affected limb in water up to 40 °C before maintaining it in raised position, and steroidal or non-steroidal medicines.<sup>5</sup>

These additional comments aim to emphasize the importance of establishing consensual management protocols specific for fish poisonings.

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## ΠΕΡΙΛΗΨΗ

## Η δηλητηρίαση από δράκαινα: Μια δύσκολη κατάσταση για θεραπεία

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