

HBO AS ADJUVANT THERAPY IN LESIONS SUBSEQUENT TO THE BITE OF AN ATROX ALBINUS RATTLE-SNAKE. A CASE REPORT IN HUMAN.

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Introduction

During the usual care of the animals entrusted to him, the Director of the reptile house in the Republic of San Marino received a single-tooth bite to his left hand by one of the most venomous snakes present: an Atrox Albinus Rattlesnake. Reported effects of this envenomation are: skin lesions, hemolysis, rhabdomyolysis, toxic shock, disseminated intra-vascular coagulation.

Materials and Methods

The patient:

Male, 61 y.o.; soon after the bite self-applied a tourniquet and moved on his own to the local ER, where he was found conscious, cooperative and hemodynamically stable. The left hand demonstrated numerous hemorrhagic vesicles and progressing edema. At the wrist and forearm serous-hemorrhagic flitenaes were developing. There was significant swelling, extending up the shoulder. Posterior ecchymotic lesions were present at the root of the arm. There were no significant changes in motility nor sensorium of the left arm and hand; ulnar and radial pulses were palpable. The envenomation was judged as severe, but there were no systemic signs of toxicity. The laboratory tests reveal a modest leukocytosis. Diuresis was preserved (at least 1ml/Kg/h). Over the next few hours the patient received intravenous supportive therapy and benzodiazepines for anxiety.

Treatment:

The patient received fluids and antibiotic prophylaxis (amoxicillin/clavulanic acid: 1.2gx3/die) and a standard initial dose of 6 vials of antidote. On the 3rd day after continuing conservative therapy the patients received surgical curettage with extensive dressing change and drainage of localized skin bullae; and initiated adjuvant Hyperbaric Oxygen therapy, repeated 6 times, at 2.4 ATA, 25'x3 at a FiO2=1, two 5' (minutes) air-breaks interposed. HBO was initiated owing to an incipient compartment syndrome (1,2,3), and it was continued daily up to a safe discharge of the patient; he left the hospital after initiating rehabilitation therapy and with healing hand lesions.

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Results

The cutaneous lesions were healed in 40 days. At 8 months there's persistent stiffness of the left hand, the patient reports progressive improvement but closure of the hand is still partial (estimated 60-70%).

Conclusions

In this case of rattlesnake-envenomation, HBO provided adjuvant therapy for the suspected ischemic areas of the hand and forearm. Previous descriptions of HBO after envenomations appear to be useful in the post-acute phase.

References

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