Management of severe head injury with brain exposure in three loggerhead sea turtles
_Caretta caretta_

D. Franchini¹*, L. Cavaliere¹, C. Valastro¹, F. Carnevali², A. van der Esch², O. Lai¹, A. Di Bello¹

¹Department of Veterinary Medicine, Bari University, Strada Provinciale per Casamassima km 3, 70010 Valenzano (Ba), Italy
²Energy and Sustainable Economic Development (ENEA), Casaccia Research Centre, Via Anguillarese 301, 00123 Rome, Italy

*Corresponding author: delia.franchini@uniba.it

ABSTRACT: The loggerhead _Caretta caretta_ is the most common sea turtle in the Mediterranean. Currently, sea turtles are considered endangered, mainly due to the impact of human activities. Among traumatic lesions, those involving the skull, if complicated by brain exposure, are often life-threatening. In these cases, death could be the outcome of direct trauma of the cerebral tissue or of secondary meningoencephalitis. This uncontrolled study aims to evaluate the use of a plant-derived dressing (1 Primary Wound Dressing®) in 3 sea turtles with severe lesions of the skull exposing the brain. Following surgical curettage, the treatment protocol involved exclusive use of the plant-derived dressing applied on the wound surface as the primary dressing, daily for the first month and then every other day until the end of treatment. The wound and peri-wound skin were covered with a simple secondary dressing without any active compound (non-woven gauze with petroleum jelly). Data presented herein show an excellent healing process in all 3 cases and no side effects due to contact of the medication with the cerebral tissue.

KEY WORDS: Wound healing · Dressing · Skull fracture · Brain injury · Trauma · Chelonid