

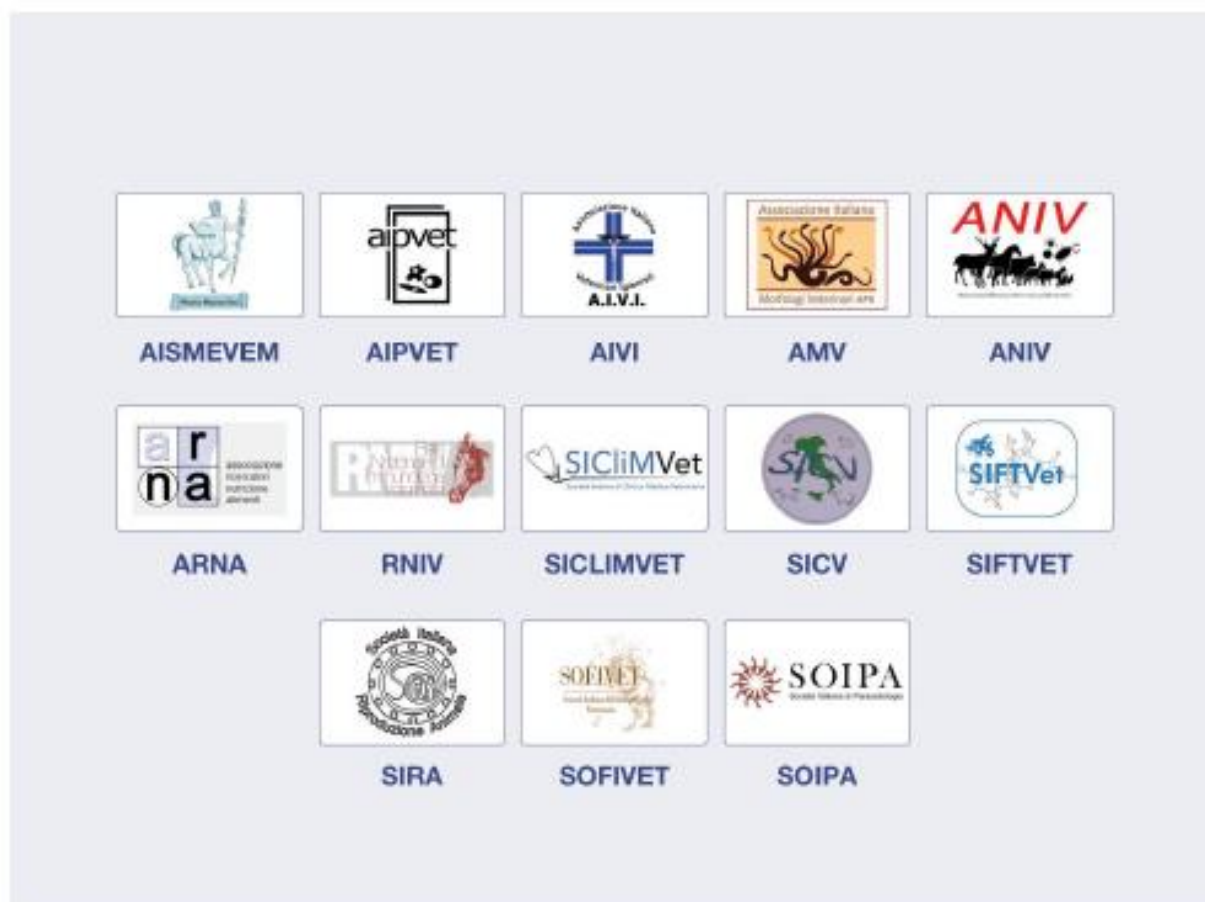


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EXTERNAL SKELETAL FIXATION FOR TREATMENT OF HIND LIMB FRACTURES IN NINE FERAL PIGEONS (*COLUMBA LIVIA*)

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Traumatic fractures of the limbs are frequent causes of admission to wildlife rescue centers [1]. Even if the general principles and goals in fracture treatment in conventional species could be applicable, anatomical, and physiological peculiarities of birds should be considered [2]. External fixation is considered the gold standard for hind limb fractures in birds, because it is minimally invasive, preserves the bony vasculature and surrounding tissues, and allows rapid compensation of weight-bearing forces. Literature regarding the outcome of this kind of treatment for traumatic fractures in feral pigeons (*Columba livia*) is lacking, with a case report only [3]. The aim of this study was to evaluate the outcome of the treatment of pelvic limb fractures with an acrylic resin external fixator in 9 wild pigeons. 3 pigeons had fractures of the tibiotarsus and 6 of the tarsometatarsus. Surgery was performed, with anesthesia induced with a mix of ketamine and medetomidine (IM) and maintained with isoflurane. The diameter of the K-wires ranged from 0.8 to 1 mm. The tibiotarsal fractures were treated with tie-in and type 2B fixators and the tarsometatarsal fractures with type 2B and type 3 fixators. Fracture reduction was achieved by skeletal traction; the k-wires were connected using acrylic resin injected into a plastic straw of 4 mm diameter; for type 2B external fixators, the reduction was temporarily maintained, on one side, with Fixateur Externe du Service de Santé des Armées (FESSA), then removed after polymerization of the resin. The fixators were removed, following radiographic control, between the fifth and seventh week after surgery. All subjects were released into the wild after bone healing and functional recovery. Compared to other k-wire connection methods, the acrylic resin is light, rigid, inexpensive, highly adaptable in its application and well tolerated by the animal [4]. External fixators can be considered as a therapeutic method in the treatment of pelvic limb fractures in medium-sized wild birds.

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