

Transposition of Flexor Carpi Ulnaris and Superficial Digital Flexor Muscles for Filling Muscle Defects Afterpancarpal Arthrodesis in a Dog

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Introduction: A 2-year-old male Chinese-chin dog weighing 3 kg was referred to The Chonbuk Animal Medical Center, Chonbuk National University with carpal instability. The dog had a history of antebrachiocarpal instability due to automobile accident 3 months ago, which was treated in the Local Animal Hospital performing pancarpal arthrodesis using K-wires. This treatment was unsuccessful for loosening of the K-wires.

Materials and methods: Physical examination revealed instable, painful right carpal joint. Radiographs showed sclerosis around the cuboidal bones. With a second surgery the K-wires were removed, the wound was debrided and pancarpal arthrodesis was performed using 7-hole plate and screws. The skin and subcutaneous tissues were found tensed and inadequate for proper closer of the wound which was due to traumatic loss of tissues from the accident, wound dehiscent after two times of operation and the volume of implants. The defect was filled by the transposition of flexor carpi ulnaris and superficial digital flexor muscles and tubed skin flap.

Results: After 7 days, the muscle flap survived but the skin flap became necrosed. However, 20 days after, the skin defect was substituted with granulation tissues.

Clinical relevance: Transposition of the flexor carpi ulnaris and superficial digital flexor muscles can be a useful procedure for filling muscle defect in the operated patient as in pancarpal arthrodesis.

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