SURGICAL TREATMENT FOR LONG-TERM SEQUELAE AFTER COBRA BITE

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OBJECTIVE: The surgical treatment for long-term sequelae after snake bite is not described at the scientific literature. We expose a surgical treatment based on fasciectomy, the macroscopic and microscopic features and the results of 2 cases of wrist fixed dorsiflexion contracture after Indian cobra bites.

METHODS: A collaboration with the Bathalapalli Hospital in India is being developed for the last 8 years. The two patients reported refered to be victims of a local cobra bite named Naja at the dorsal area of the left wrist. First patient: 43 yo woman with a 8-year history of 70 degrees dorsiflexion contracture. Opposition of the thumb was impossible. Second one: 23 yo woman with a 6-year history of 64 degrees dorsiflexion contracture and opposition of the thumb with only the index finger was possible. They didn’t developed systemic chronic affection but joint stiffness, muscle wasting and reduced muscle power were reported.

RESULTS: Women underwent elective surgery with a dorsal wrist incision. A retraction of the soft tissue under skin was found, with fibrotic bundles but without infiltration of the rest of structures. The fibrotic tissue was excised and a dorsal capsulotomy was arranged. The histopathology reported bundles of fibro-collagenous tissue with degenerated and hyalinized areas, fibroblasts and occasional lymphocytes were seen between the collagen bundles.

Women achieved a 70 and 64 degrees improvement in the range of motion respectively after the surgery and the rehabilitation programme. This allowed the thumb to touch the tips of the fingers in both patients and to grasp objects in the second patient.

CONCLUSIONS: The treatment of the chronic musculoskeletal disability following a snakebite is not well known, whereas it’s widely described the acute treatment. Our work could be the first mention in the scientific literature. The snakebite in upper limbs causes a systemic and local response to the toxin and it develops a fibrotic contracture of the soft tissues near the bite area. This long-term sequelae can be treated with a fasciectomy of the fibrotic tissue and a dorsal capsulotomy with good results. Despite the limited number of cases, we believe that this surgery provides an opportunity for disabled patients with this kind of affection.

BIBLIOGRAPHY