

4 Cases about Neglected Wounds of the External Popliteal Sciatic Nerve

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Abstract

Original Research Article

Neglected wounds of the external popliteal sciatic nerve are common in open leg or knee Trauma. Early management by microsurgical techniques nerve grafting is the rule for satisfactory outcomes, palliative surgery is addressed to patients seen late, direct sutures giving worse results.

Keywords: Neglected, wounds, External Popliteal Sciatic Nerve.

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INTRODUCTION

Neglected sciatic nerve wounds are wounds that have been diagnosed after 6 months of trauma. It is a rare attack, including the clinic and the treatment different according to the place of the attack.

MATERIAL AND METHODS

They are 6 patients with neglected sciatic nerve injurient who were treated in the Ibn Sina trauma and orthopedics department between 2000 and 2010.

The average age of our patients was 27 years with extreme ages between 21 and 37 years old. All our patients were male (100%). The main etiology was a stab wound (aggression) (100%)

The affected side was the left side in 4 of our patients (66.6%) the right side was reached only in two patients (33.3%). The place of the wound was mostly at the level of the thigh in 4 patients (66.6%), two of our patients had a wound in the left buttock (33.3%) none of our patients had a wound at the knee.

The neurological examination of the affected limb identified an isolated EPS paralysis in 4 patients (66.6%), and two of our patients had complete sciatic paralysis (25%).

An EMG was requested in all our patients and which objectified a partial axonotmesis of the sciatic nerve in 4 of our patients (in 66.6%) which reflects the isolated involvement of the PES, and two of our

patients (33.3%) presented complete neurotmesis of the sciatic nerve. The average waiting time was 7 months.

Three of our patients underwent a truncular EPS graft from the ipsilateral outer saphenous nerve. One of our patients underwent a late suture with neurolysis and two of our patients underwent a double arthrodesis with posterior tibial transfer.

The mean follow-up was 12 months, during which the result was satisfactory in 50% of cases for Patients who received an EPS transplant. The result was good for patients who received palliative treatment, but the result was modest for the patient who benefited from suturing with neurolysis.



Fig-1: intraoperative image of a wound of the sciatic nerve

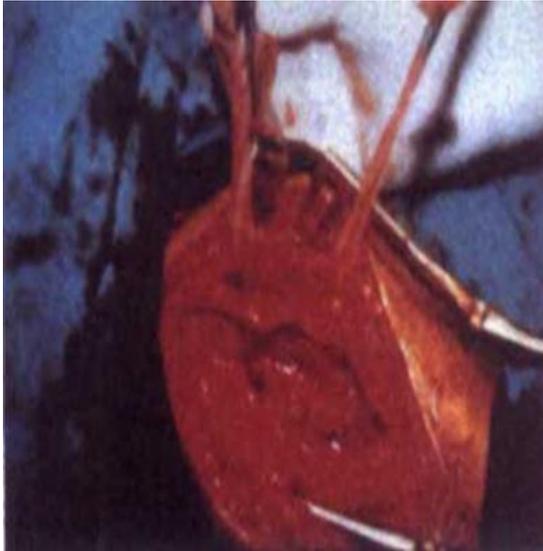


Fig-2: shows the suture of the sciatic nerve

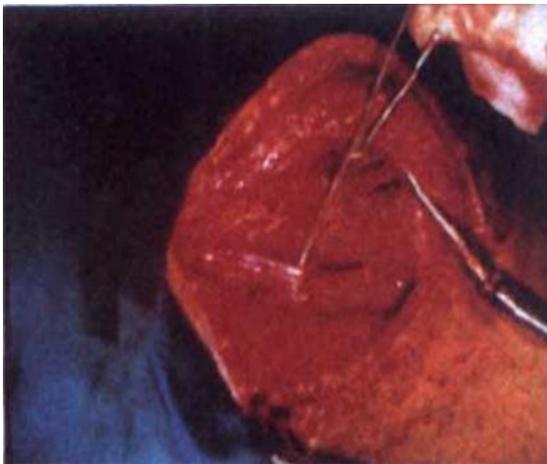


Fig-3: Shows a wound of the sciatic nerve

DISCUSSION

Neglected sciatic nerve wounds is a rare condition [1, 3, 4], the average age reported in the literature is 29 years [3, 4] which approaches the average age of our series which is 27 years, in the literature we find that it is mostly the male sex which coincides with our series [1, 3, 4, 7].

The main etiology in our series was mainly stab wounds, however, in the literature or found either stab wounds or firearms [4-7]. The main localization in

our series is mainly the thigh, the literature reports that it can be either a wound of the thigh or knee [3, 4].

Clinically, it can be either a compression syndrome, an interrupt syndrome or an irritation syndrome [6-7] The literature reports that this is most often an isolated attack of PES, which coincides with our series. EMG is an essential examination in the diagnosis and it allows to show either a neurapraxis, an axonotmesis or a neurotmesis [5].

The treatment is based mainly on nerve grafts, the end-to-end sutures with neurolysis do not give good results, in front of a complete neglected section of the sciatic nerve, the palliative treatment is necessary [3-4].

CONCLUSION

Neglected sciatic nerve wounds are infrequent lesions. Management must be early with implementation of the Microsurgical techniques to avoid possible sequelae. Even if the treatment is well done, the results often remain modest.

REFERENCES

1. Birch R. Nerves injuries of the lower limbs. *Foot Ankle Surg.* 1998; 4: 109-117
2. Blair FW. Motor testing. In: *Operative nerve and reconstruction.* Philadelphia: JB Lippincott. 1991: 159-170
3. Bleton R, Alnot JY, Oberlin C. Traumatic lesions of the sciatic trunk and its terminal branches. *Rev Chir Orthop.* 1993; 79: 205-217
4. Bleton R, Cesari B. Traumatic lesions of sciatica. In: *Traumatic lesions of the peripheral nerves.* Paris: French scientific expansion. 1997: 115-125
5. Boulu P. Electromyography and evoked potentials in the pathologies of the musculoskeletal system. *Encycl Med Chir (Editions Scientifiques et Medicales Elsevier SAS, Paris), Musculoskeletal System.* 1997: 1-7
6. Danielsen N. Injury degeneration and regeneration. In: *Operative nerve and reconstruction.* Philadelphia: JB Lippincott. 1991: 109-131
7. Dellon AL. Sensibility testing. In: *Operative nerve and reconstruction.* Philadelphia: JB Lippincott. 1991: 135-158.