Epidemiology of upper limb peripheral nerve injuries in the material collected in the Department of Orthopedics and Traumatology Medical University of Bialystok

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ABSTRACT

Introduction: Common etiologies of acute traumatic peripherial nerve injury include penetrating injury, crush, stretch, and ischemia.

Purpose: This paper reports an epidemiological and clinical study of patients with peripheral nerve injuries who were treated for upper limb trauma, which included nerve injury, surgically treated in the Department of Orthopedics University Hospital in Bialystok, in the years 1997-2007.

Materials and methods: A total of 202 patients with injury to the median, ulnar and radial nerves were involved in the study. Based on the medical history concerning day care and inpatient hospitalization, surgery books data and the analysis of medical histories, the data referring to the nerve trauma were analyzed.

Results: The data allowed a reliable assessment of

the population of patients with upper limb nerve injury and methods of treatment, as well as quantitative presentation of the methods of repair and reconstruction of the damaged nerve stem.

Conclusions: In the Department of Orthopedics, Medical University of Bialystok, in the years 1997-2007 delayed nerve injuries were more frequently treated than the immediate ones. Surgical treatment of nerve injuries most frequently used primary suture and cable grafting reconstructions. Secondary epineural suture of the nerve was performed more rarely. Autogenic nerve graft segments were most frequently collected from the ulnar nerve of the lower extremity. The medial antebrachial cutaneous nerve grafting was much seldom performed.

Key words: epidemiology, wounds, injuries, upper extremity, ulnar nerve, median nerve, radial nerve

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