

Retrospective Study Regarding Objectives and Results of Upper Limb Transplant

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Abstract

Introduction: Upper limb amputation causes a severe permanent disability. Upper limb transplantation is subject to treatment to prevent rejection and influenced by organizational, socio-economic, psychological, ethical factors. Analysis of the results creates the potential for continuing this work in specific conditions in our country.

Material and methods: We retrospectively analyzed data from the literature. Upon completion of documentation (May 2011) there were 74 transplants in 53 patients worldwide. We have studied the available information on the surgical interventions and their results.

Results: Upper limb allograft has a complex structure comprising tissue with variable antigenicity. Surgery is performed by a large multidisciplinary team, whose increased experience leads to a shorter length of the operation. The postoperative follow-up and rehabilitation program are standardized, and patients' compliance is essential. The greatest advances have occurred in immunosuppression protocols.

Conclusion: The upper limb transplantation was performed in 20 centers of 12 countries so far. The specification of the indications and contraindications, the proper selection of patients, the increasing experience and new immuno-suppression protocols provide a higher success rate and quality of functional outcome. By applying these conceptual acquisitions we will be able to create conditions for the integration of our country in this globally convergent scientific effort.

Key words: upper limb transplant, hand transplant, allograft, composite tissue transplantation, immunosuppression treatment

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