The Ejtm Special “Translational myology beyond the denervated muscle”

The Issue Vol. 24 (1), 2014 of the Journal of Translational Myology/Basic Applied Myology was the first to belong to the Ejtm Specials on “The long-term denervated muscle”. This series was dedicated to pioneers and followers of biology, physiology, pathology, therapy and rehabilitation of the permanent denervated muscle, in particular to the physical approaches for the diagnosis and treatments in those cases in which the hope for reinnervation is lost or very poor. Although some study may be found in the literature of the Nineteenth Century, it was in the 1940s that the study of events occurring in denervated muscle fibers emerged as a topic distinct from the more clinical relevant studies of nerve regeneration and muscle reinnervation. During the following twenty years, the reports increased in numbers year after year. Finally in 1962 the book edited by Ernest Gutmann summarized previous knowledge from biology to rehabilitation by electrical stimulation and opened the modern era of “The Denervated Muscle”. Three pioneers of the modern studies are contributing to the Ejtm Specials and/or lectured at the 2014 Spring PaduaMuscleDays: Bruce M. Carlson, Terje Lømo and Clara Franzini-Armstrong.

The collection of Abstracts of the 2014 Spring PaduaMuscleDays, the majority concerning neuromodulation of long-term denervated muscles, closes the first issue of the Ejtm Specials on the long-term denervated muscle. The Helmut Kern’s Habilitation Thesis (1995) filled the Ejtm-BAM volume 24 (2), 2014. This Ejtm-BAM volume 24 (3), 2014 complete the first series of Ejtm/BAM Specials with an issue that is more properly designed “Translational myology beyond the denervated muscle” containing also some interesting articles that are of more broad interests.

3. Gutmann E, Sanders FK. Recovery of fibre numbers and diameters in the regeneration of peripheral nerves. J Physiol 1943;101:489-518
4. Gutmann E, Guttmann L. The effect of galvanic exercise on denervated and re-innervated muscles in the rabbit. J Neurol Psychiatry 1944;7:7-17


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