

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
PIBIC Last Name - Meireles-Teixeira First Name - Jorge Middle -

Service (sector) Strabismus N° CEP

Autologous Transplantation of Extra-Ocular Muscles in Rabbits: anatomo-pathologic evaluation.

Meireles-Teixeira J, Sousa Filho JP, Martins MC, Bicas HEA.

Purpose: the transplantation of extra-ocular muscles (EOM) was used as an alternative to muscle elongation instead of using synthetic materials.

Method: was preformed the transplantation of superior rectus muscles (SR) in rabbits and fourteen of them were selected to microscopic study. Six millimeters of left RS were resected and inserted at the end of the right SR. Animals were examined by optical microscopy at 45, 60 and 90th post-operative days (PO), comparing their fibrosis and atrophy with those of the resected muscles (left SR).

Discussion: as one could expect, the fibrosis was greater in grafted group once it had more surgical manipulation. Otherwise, despite of that fact, we did not observed greater atrophy among these samples in none of the PO (it was not statistically significant). Some papers describe total substitution of normal muscular tissue by fibrosis, but we did not verify it either.

Conclusion: microscopically, the grafting technique induced more fibrosis than the conventional surgery (resection) but the damage was not big enough to induce atrophy of those muscles. This results, together with those good ones related to macroscopic and mechanical evaluation, presented last year, encourage us to try to perform this technique in selected cases of strabismus in humans, such as big squints associated to deep amblyopia of just one eye.