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L. Plaghki, W. Lokietek et G. Maréchal-

(Laboratoire de Physiologie Générale des Muscles et Laboratoire d'Orthopédie,
UCL, B-1 200 Bruxelles).

**Redifférentiation des muscles paravertébraux après rhizotomie
unilatérale dorsale chez le jeune chien.**

Translated from French

**Redifferentiation of paravertebral muscles after unilateral dorsal
rhizotomy in young dogs**

Five dorsal roots (thoracic level 5 to 10) are cut on the right side in the epidural space between the dorsal ganglion and marrow in young Beagle dogs aged 6 months (n: 4), taking great care not to damage the anterior roots. These dogs then develop a scoliosis with convexity oriented towards the side rhizotomised. One to two months after surgery, the deformation is stabilized and irreducible with a curvature of 50 ° (method of Cobb). At the third postoperative month we take five pairs of muscles on either side of the column at the apex of the curvature.

In convexity, the paravertebral muscles (ilio-costalis and intertransversalis) have 1.5 to 2 times more AMP deaminase, creatine phosphokinase, phosphofructokinase, aldolase, pyruvate kinase, LDH and malate dehydrogenase but only one third of the isocitricodehydrogenase (mitochondrial) activity of the concave muscles.

In the trapezius and latissimus-dorsi muscles the convex /concave is less marked (+ 5 to + 20% for glycolytic enzymes and - 10 to 15 for the ICDH). The intercostal muscles left and right are the same. Therefore, rhizotomy caused differentiation of the homometameric homolateral muscles to a more glycolytic type than that of the muscles heterolateral. In the deafferented territory this transformation is maximal in the paravertebral muscles and little or not marked in the parietal muscles.