

5.23.69



Dear Dr. Hamburger.

A graduate student of mine & I are studying the effects of decapitation, consequent removal of all endocrine influences on the development of the sciatic nerve in the chick. The experimental embryos in addition, have clearly been deprived of the influence of descending brain tracts. Trying to ~~ascertain~~^{estimate} the relative contributions of each of these effects towards the degeneration among nerve fibers which we see at later stages (ca. 19 days) I have re-read ~~your~~ the splendid papers of your colleagues & yourself in recent years (1965. Hamburger, Balaban, Oppenheim & Wenger; 1966. Hamburger & Wenger & Oppenheim; 1967. Deaker & Hamburger).

In the '66 paper you study the effect of both removal of thoracic cord & deprivation of sensory input on the lateral motor column. Table 2 of this paper shows the detailed effects of the combined operation as seen from 8½-17 days. However I don't find ^{corresponding} data for the controls with thoracic gaps. Have you any unpublished findings relating to these embryos? I should be very grateful indeed if you could give us the benefit of your views on the effects of thoracic gaps ^{alone} on the cord at lumbosacral levels; if ~~you~~ this would not ~~be~~ ~~troubling~~ ~~you~~ unduly.

We have now turned to studying the various effects of this toxin on the development of the nervous system, partly as a means of further exploration of the relations between center & periphery.

With kindest regards

Yours sincerely

Arthur Hughes.