

Association for the Abolition of Animal Experiments

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Founded in 1979 under the name of CIVIS

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The myth of animal experimentation:

Curing paraplegia

Will paraplegics soon be able to walk again thanks to experiments on rats and monkeys, as animal experimentation supporters claim?

In 1990, animal experimenters at the Brain Research Institute of the University of Zurich succeeded in making severed spinal cord nerve fibers regenerate in rats. Since then, animal experimentation supporters have been claiming time and again that thanks to this «spectacular breakthrough», it will soon be possible to cure paraplegics and spare them a life in the wheelchair. Is this true?

► In rats it was discovered that severed nerve fibers cannot regenerate because of growth-inhibitory substances in the spinal cord. In order to block these substances, cancerous cells were injected into the brain of rats. These cells developed into tumors and secreted antibodies into the surrounding cerebrospinal fluid which blocked the growth-inhibitory substances. At the same time, the spinal cord was not completely, but only partially severed, so that the rats could still move to some extent – i.e. they were not paralyzed.

► At the end of the experiments, some of the severed spinal cord nerve fibers had regenerated and the rats «almost completely» regained their mobility. After also testing the antibody therapy on partially paralyzed monkeys and observing a «functional recovery», the researchers are now testing the therapy on paraplegics. However, due to fundamental differences between species and their metabolisms, animal experiments do not permit valid, reliable conclusions about humans. For this reason, the responsible researcher *Prof. Martin Schwab* admitted in 2006, after having «tested» his antibody therapy on animals for 16 years: «We still do not know whether the patients will tolerate the therapy well and whether it will lead in the end to a functional recovery.» In fact, only experiments on humans can provide such information.

► Contrary to animal experiments, which are performed under artificial laboratory conditions, the human spinal cord is neither surgically nor cleanly severed at the time of injury. Rather, the majority of paraplegics suffer severe wounds and contusions affecting large segments of the spinal cord which can hardly be treated successfully with therapies «tested» on animals. Furthermore, the four-legged gait of an animal is neither anatomically nor biomechanically comparable to the two-legged gait of the human being.

► The fixation on invalid, unreliable animal experiments guarantees that paraplegia remains incurable. The only hope of perhaps one day curing paraplegia lies – as in all other fields of medical research – in methods which are of direct relevance to humans. Visit our website www.animalexperiments.ch in order to learn more about such methods.