## RUPRECHT-KARLS-UNIVERSITÄT HEIDELBERG





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Study titled "Regular surveys on problems, special needs and care deficiencies of Contergan victims"

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## CERTIFICATE FOR PRESENTATION TO THE ATTENDING PHYSICIAN

When taken during pregnancy, Contergan causes prenatal impairment of the locomotor system and the internal organs. The type and extent of the impairment depends on the time of administration and the dosage of medication. Contergan causes damage to all growing vessels. Since all organ systems of unborn are still growing, although to different extents, there is a high risk of vascular impairment. The patient file of a Contergan victim available to the Institute of Gerontology describes "thin, partly acrostic arteries" showing "fibromuscular dysplasia". This patient also has hypoplastic vessels in the venous segment. The path of the vessels is irregular so that atypical vessel paths are to be expected during surgical interventions.

Contergan victims report on strokes occurred before the age of 50; one of them stated dysplasia of the carotid artery as the causation. In many of the patients affected, it is difficult to take blood samples; their pulse and blood pressure are not always measureable. The literature (Lancet 1967) describes "conditions similar to Perthes' disease" in children affected by thalidomide. Some of those affected state increasing destruction of their hip joints as a possible consequence of disturbed and insufficient blood circulation in their hip joints.

The malformation of the organ systems also concerns the nervous system. Patients affected report on an atypical path of their peripheral nerves e.g. in the maxillo-mandibular area, resulting in the



Institut für Gerontologie der Universität Heidelberg necessity for laterally inverted administration of anaesthesia during dental interventions. Neurologists found malformation of the cranial nerves in one patient with impairment in the cranial area (eyes, ears, maxillo-mandibular area) and difficulty in swallowing.

Increasing myasthenia and reduced physical fitness is reported by a great number of patients affected; these symptoms have increased significantly during the last three to five years. After heavy physical exertion, the patients affected often need one to several days to recover. When placing muscular strain on extremities, even on those not visibly affected, muscle cramps of various intensity are described, ranging from fine rhythmic persistent convulsions to painful muscle contractions including long-term painful tenseness.

Based on the targeted and differentiated survey of Contergan victims and the inspection of the patient files, we have come to the conclusion that some of the patients affected might have suffered prenatal impairment of the vascular system and/or the nervous system and/or the muscular system. This impairment is referred to as long-term sequelae, which have so far not been systematically investigated. Since Contergan victims might be affected by long-term sequelae, these preliminary examination results will be forwarded to the attending physicians.

