The objective of this thesis is to describe the Modified Frenchay scale and its use in stroke patients with spastic paresis. The thesis is divided into two parts – theoretical and practical. In the theoretical part, the issue of spastic paresis in stroke patients is specified; and in addition to this the methods of examination and assessment of spasticity are presented and described in detail. A large part of the thesis deals with the history of Frenchay arm test and its modification – Modified Frenchay scale. The theoretical part also contains a description of the phases and types of grasp, some of which can be observed during the assessment with Modified Frenchay scale. The practical part consists of a questionnaire mapping the situation in the institutions in the Czech republic, that use the Modified Frenchay scale in their practice, and of two case reports of patients after stroke. Examinations and evaluations of spasticity, including Modified Frenchay scale, which are described in the theoretical part, are applied in these case reports. The practical part also contains an evaluation of inter-rater reliability of the Modified Frenchay scale. The main contribution of this thesis consists in creating a handbook for Modified Frenchay scale and in evaluating the inter-rater reliability. The handbook contains a description of the tools used in testing, their position in front of the patient, the list of examined antagonistic muscle groups and a worksheet for recording patient’s impairment.